1 An Essay on Gaol abuses and on the means of redressing them together with the general method of healing disorders to which prisoners are most incident by J. Fitzpatrick M.D. Knt. 1784.

2 A few observations respecting the present state of the poor and the defects of the poor Laws with some remarks upon parochial Assessments and expenditures By the Revd H. B. Dudley. J.P. 1802.

3 A plan for the improvement of the internal police of prisons by W.M Pitt Esq M.P. F.R.S. - 1801.

4 Thoughts on the defective state of Prisons, and suggestions for their improvement, together with hints for the discipline, police, and labour of prisoners, with the plan of a Gaol and house of Correction, for the accommodation and labour of 280 persons. by Thomas Le Breton. 1822

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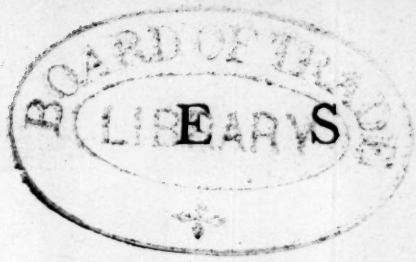

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AN

ESSAY

ON

GAOL-ABUSES,

AND ON THE

MEANS OF REDRESSING THEM:

TOGETHER WITH THE

GENERAL METHOD

OF

TREATING DISORDERS

TO WHICH PRISONERS ARE MOST INCIDENT.

By JEREMIAH FITZPATRICK, M. D. Knt.

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M.DCC.LXXXIV.

ERRATA.

Page 19.	line 14.	for *entervening* read *intervening*.	
22.	18.	for *ſubject* read *ſubjects*.	
23.	3.	for *meeaſure* read *meaſure*.	
27.	13.	for *neceſſiary* read *neceſſary*.	
36.	14.	for *even* read *ever*.	
38.		for *whether* read *when*,	in the note,
47,	14.	for *oze* read *ooze*.	
58.	1.	for *bath* read *bathe*.	
59.	9.	for *breath* read *breathe*.	
66.	1.	for *Romazini* read *Ramazini*.	
80.		for *raged* read *ragged*.	
89.	89.	for *henious* read *heinous*.	
114.	1.	for *whoſoever* read *whomſoever*.	
127.		for *cognoſure* read *cognoſcere*.	
		for *ſumpſit* read *ſumſit*,	in the
		for *predat* read *prodat*.	note.
		for *herment* read *Sennert*:	
137.		for *beginning* read *begining*.	
143.		for *graving* read *growing*.	
		for *vegitable* read *vegetable*.	

TO HIS

EXCELLENCY

CHARLES, Duke of *Rutland*,

Lord Lieutenant General and General Governor of *Ireland*, &c. &c.

May it pleaſe your Grace,

THE unexampled act of beneficence which immediately ſucceeded your arrival in this kingdom, marks the general benevolence of your mind, and proclaims you the friend of the diſtreſſed. ✣

The deſign of the following eſſay is to alleviate the miſeries of the moſt wretched part of the community; I am therefore emboldened to lay it at your

✣ - The Hall of Snow being then very great

your Grace's feet, and intreat your patronage of it.

The public ſervices of your Grace's anceſtors have long been a theme of praiſe, and ſubject of gratitude, to every claſs of people in his Majeſty's dominions. Your Grace's private virtues are univerſally felt and acknowledged; and as public conduct muſt ever be influenced by private virtue, I preſage moſt happily for my country, from your Grace's government.

I have the honour to be,
your Grace's moſt obedient,
and moſt devoted
humble ſervant,
JER^H. FITZPATRICK.

PREFACE.

THE chief purpoſe of the ſtudy of medicine is, to acquire ſuch information as may lead to certain and effectual methods of preventing and curing diſorders. How far I have ſucceeded muſt be left to time to affirm: to thoſe who imagine I have not altogether failed, I need make no apology; to thoſe who are of a contrary opinion, I hope it will be ſufficient to obſerve, that every attempt to be ſerviceable ſhould plead its own excuſe.

In

In the courſe of an extenſive practice for ſeveral years, I have had frequent opportunities of conſidering particularly the nature of fevers, often of the moſt putrid and malignant kind; ſome of which were gaol fevers; and others, though not in gaols, highly deſerved the appellation, for I imagine a diſtinction unneceſſary between the gaol, the hoſpital, or poor man's cabbin fever, if the ſame cauſes exiſt capable of producing them, and that ſimilar effects ariſe from thoſe cauſes. There are but few phyſicians who viſit the poor in city or country, who do not often find ſeveral in narrow confined rooms, in the ſame bed, inſpiring the air which another

had

had that inſtant diſcharged, perhaps from putrid lungs; add to thoſe annoyances, the exhalations which conſtantly ariſe from their excrements and perſpiration; in apartments rendered damp by the diſcharges, and warm from the crouded ſick, than which, no other cauſes are more capable of promoting putrefaction; particularly, when even if providence had early induced them to have in thoſe confined chambers an aperture or window, the ignorant attendants take care to ſtop it with a wad or rag, ſo as in a great meaſure to exclude that on which life depends,—the untainted air.

As it is merely the intention of this

ſmall work to point out methods by which the grievances of wretched priſoners may be alleviated, and to ſhew what are the effects likely to reſult from confinement, improper diet and foul or tainted air, &c. I hope the candid reader will excuſe me for not entering into a variety of phænomena which would fill volumes, and may be met with in the works of Pringle, Black, Macbride, Prieſtly, Lavoſier, Harrington, and many other ingenious authors.

The method of treating gaol-diſorders ſhall be laid down in a manner conciſe, and in my opinion eligible; and as from juſt methods every thing will

will flow eaſily and diſtinctly, ſo a few plain medicines in the treatment of complaints will be found ſufficient to anſwer the intentions of the preſcriber, as it has been ever acknowledged that ſucceſs has kept pace with the ſimplicity of preſcription.

AN ESSAY

ON

GAOL-ABUSES.

To preſerve the human frame from thoſe diſorders incidental to our nature, and to repel them by antidotes and medicine, which kind providence has placed within the reach of thoſe who devote their time to the ſtudy of the healing art, is one of the moſt laudable and beneficent occupations about which a friend to mankind can employ himſelf: The attainment of this end is intimately connected with the public good: In no one inſtance is the exertion of the phyſician more neceſſary than in endeavouring

deavouring to obviate the miſeries to which priſoners are unfortunately expoſed.

From an experience of many years, in the attendance on gaols, I have been able to form poſitive opinions, in reſpect to the general cauſes of thoſe diſorders to which perſons confined are moſt ſubject. Thoſe moſt alarming are of the putrid and malignant kind, which generally are highly infectious; to prevent which, the following obſervations are laid down.

The powerful influence of air on animal bodies, as the means of life and health, and the cauſe as well as the cure of diſorders, is evident from daily obſervation. There is no effect, however great, that may not be expected from a fluid, poſſeſſed of elaſticity and gravity, whether in motion or in a ſtagnant ſtate, preſſing us continually on all ſides, and in immediate

mediate contact with the lungs; and which, being inſinuated into the pores of our aliment, is capable of conveying whatever noxious qualities it poſſeſſes through the digeſtive organs into the maſs of blood; here, acting as leaven, it muſt ſoon or late exert its influence, and ſo contaminate the juices, if not altered by the providential exertion of the preſerving quality (or *vis medicatrix naturæ*) in animated beings.

To enter into a detail of all the conſequences which ariſe from air too warm, cold, moiſt, or dry, is not the intention of this ſmall work: It is intended merely to ſhew the good effects, with which a ſalutary ſtate of atmoſphere is generally attended.

The better to explain the nature of pure common air, it will be neceſſary to form an idea

idea of its conſtituent parts, that we may be capable to reſtore the deficient ingredient, or counteract the predominant (whenever either ſhall happen) ſo as to render it ſalutary. Many authors have written on the ſubject of air, but none, ſince the indefatigable Prieſtly, ſeems to have ſo good a title to the gratitude of the public, as the ingenious Harrington.

" His idea of atmoſpheric air is, that it is compoſed of philogiſton,* water, and fixed air, in due proportions; and that ſo long as this equilibrium continues, the air (independent of a ſtagnant ſtate, or of noxious exhalations, which may charge it) is fitted to the common purpoſes of life." We ſuppoſe, with the greateſt probability, founded on experiment, that the phlogiſton, or the fiery element of the air,

* Fire of an alcaline nature.

is conſumed or taken into the blood through the lungs at every time we inſpire; and that whereas heat is the vivifying principle in all bodies, but more remarkably in the animal creation, it is not ſurprizing, in proportion to the quantity of this element in the atmoſphere, and to the magnitude of the lungs which inhale it, that thoſe animals are moſt vigorous, animated, and have the warmeſt florid blood, ſuch as the lion, tyger, &c. who have larger lungs than other animals, and inhabit dry warm regions where that element abounds: But when we turn our thoughts on the lungleſs tribe, ſuch as the ſnail, &c. there, we have ſcarce a degree of animation, or heat, above the vegetable ſyſtem; and their ſenſibility and powers of motion are not many degrees above the vegetable kingdom; while the former have all thoſe powers and perceptions, which mark a ſtrong degree of animal life.

Yet notwithſtanding the great advantages ariſing from this element, which vivifies the frame, was it not reſtrained from its violent (though natural) actions, in place of ſerving, it would become deſtructive of animal bodies, inaſmuch as it would parch up the frame, and diſpoſe the body to putrefaction: Water, as the ſecond conſtituent part of the air, is added to prevent the former effect, and fixed air, the other ingredient, to prevent the latter effect; it being conſidered the cementing principle, or vinculum, of bodies, on which their ſoundneſs and union depend, and which is conſtantly diſcharged from fermenting ſubſtances, whether of the vegetable or animal creations, and even from the bowels of the earth, particularly, when ſtirred up.

Having ſhewn what pure air is compoſed of, it will be neceſſary to point out the inconveniencies

veniencies likely to reſult from intemperate air, which may be over hot, cold, moiſt, dry, light, or heavy, independent of noxious vapours or infectious matter, of a variety of ſpecies, which may charge it.

How ſolicitous are we for the cool retreat? Whenever the air is too warm, particularly if it continues ſo for a conſiderable time, as then an unuſual langour takes place. By the rarefaction which neceſſarily ſucceeds in the fluids, the ſolids are ſo diſtended, or the union of their parts ſo divided, that in place of the compactneſs of the fibres, on which ſtrength depends, the entervening fluids, (now expanded) exert their powers and induce debility. The moſt fluid parts of the blood are diſſipated, and thoſe which remain are highly diſpoſed to putrefaction. The rarefaction mentioned is too frequently experienced in

eſtearn and ſouthern climes, by the fatal ſunſtroke, which is nothing more than an expanſion of the veſſels of the brain, by which its moſt delicate texture is preſſed, and the principle of life ſuffocated: Nearer home we find how much intenſe heat promotes bilious, putrid, malignant fevers and fluxes.

Very cold air obſtructs perſpiration, conſtringes the ſolids, and, in ſome meaſure, congeals the fluids, contracts the limbs, cauſes rheumatiſms, with a train of other miſeries; and, in many inſtances, even brings on mortification. When the blood cannot find an eaſy paſſage through the extreme veſſels, whoſe diameters are diminiſhed, and ſome times obliterated, by the continued ſpaſm induced by cold, it may lay a foundation for complaints, too often irremediable; or may be thrown on the interior vital organs, whoſe motions it ſuffocates.

Air

Air that is too moiſt, deſtroys the neceſſary elaſticity and ſpring of the veſſels, without which they cannot execute their common offices; the circulation becomes languid; hence ariſes the defect of animal heat, and a diſpoſition to obſtruction, dropſies, agues, and every other ſpecies of intermittent diſorder.

When moiſture is conjoined to heat, it more eſſentially promotes relaxation and putrefaction; and when to cold, it compleatly checks perſpiration, and tends to annihilate the very exiſtence of the vital principle.

From dry air little inconvenience is to be apprehended in our climate, as it is ſeldom attended with a degree of heat capable of rendering it noxious; the extent of ocean, moraſſes, lakes, and rivers, furniſh ſufficient vapour to ſaturate, or, as it were, modify the

air,

air, ſo as to furniſh it with its ſecond ingredient—water.—However there are ſome conſtitutions which may be conſidered huſky and dry, that, even in our clime, are inconvenienced by ſuch weather as we often have in March and October, when there are but few ſhowers, and the ſun's influence not ſufficiently great, to raiſe vapours, by which the aqueous element, or ingredient of the air, may be properly proportioned to its fire.

We can ſcarce ſuppoſe air too heavy; for although in proportion to its preſſure (which in treating on its general effects, we are to conſider equal) on the different parts of the body, we find every fibre braced, animated and fitted to execute its ſeveral functions; yet there may be found exceptions to this almoſt general rule: For in very irritable ſubject, the veſſels, on the ſurface of the body, or thoſe of the lungs,

by

by the gravity of ſuch air, may be ſo contracted, and, as it were, corrugated, as, in ſome meeaſure, to negative the free circulation of the blood; by which it will naturally accumulate in, or diſtend, the interior veſſels, which, by reſiſting the free action of the heart, may be attended with the worſt conſequences. Independent of this effect, we can conceive, on the hydroſtatical principle, that fluids will delight in moving where they find leaſt reſiſtance; it therefore may happen, that, from a weakneſs in the veſſels of ſome inward organ, the blood might be induced to ruſh thither, and cauſe inflammation, hemorrage, &c.

† As the rarefaction and condenſation of the air are indefinite, before I mention the bad effects

† Mr. Boyle found, that the air near the ſurface of the earth is compreſſed, by its own weight, into a ſpace leſs than one-thirteen thouſandth part of the ſpace it would take up if

effects likely to result from very light air, it may not be improper to state the idea of doctor Hooper, author of the rational recreations.— " He supposes a gallon of air to weigh nearly " one drachm: A column of the atmosphere, " whose base in a square inch, is equal to " fifteen pounds weight, consequently the " surface of a man's body, of six feet stature, " being on an average equal to fourteen square " feet, must be pressed by a weight equal to " 28000 pounds. This great weight is coun- " teracted by the air within the human bo- " dy; which, though small in quantity, is, by " its spring sufficient to balance the external " air." On this equilibrium, the regular motion of the fluids, and proper resistance of the solids in a great measure depend; the contained

if left at liberty; and, as the common air may be compressed into one-sixtieth of its natural space, it follows, that the air may occupy a space 780,000 times greater at one time, than at another.

and

and containing parts are mutually applied, and their reciprocal actions and re-actions, as if by uniſon render chearful the vital circulation, reſpiration, &c. This being admitted, and that the ſtrength of the human body, depends on its compact braced ſtate, whenever the air is deficient, in point of its due gravity (the neceſſary preſſure on the ſurface being removed, as that bears a proportion to the levity of the air) a general relaxation takes place; the air contained in our fluids, not finding the atmoſpheric preſſure continued*,

* If a withered apple be placed under the receiver of an air pump, according as the air is exhauſted, the apple will become more plump, and look as well, in point of roundneſs, as when firſt gathered; for the external preſſure of the air being taken off, the expanſion of that contained within the ſkin of the apple will extend it to the utmoſt, ſo as ſometimes to make it burſt. Another common experiment proves the capability of the expanſion of air in fluids: If a little warm ale is put into a glaſs and included in a receiver, upon exhauſting the receiver, the liquor will riſe in large frothy bubbles, and run over the ſides of the glaſs; that is, when the preſſure is removed, the air contained in the ale occupies a greater ſpace, and by endeavouring to ruſh where it finds leſs reſiſtance, carries the glutinous liquor in which it is fettered along with it.

expands itſelf, and by diſtending the veſſels, cauſes an univerſal plethora on the ſurface, and in the plumonary blood veſſels; and from the aerial tubes not being ſufficiently diſtended, ariſes that difficulty of breathing experienced on lofty mountains, where the air is highly rarefied, and the univerſal langour or want of agility, which we daily find on the deſcent of the mercury in the barometer, may be imputed to the ſame cauſe.

Having ſtated a variety of effects reſulting from different ſtates of the atmoſphere, it will not appear extraordinary, that many among us may enjoy health in moiſt climates, others in dry, &c. and that man often becomes an excellent barometer; and when we conſider the ſudden tranſitions from warm to cold, from damp to dry, and from light to heavy

heavy air, which from the changeableneſs of our climate we are ſo ſubject to, it will become the more neceſſary to point out ſome general rules, by way of obviating the bad conſequences likely to attend ſuch mutability.

As heat and moiſture conjoined, are the parents of vegetation, they are likewiſe ſo of putrefaction. And whereas the vital principle depends on a certain degree of heat, ſo a certain degree of cold is deſtructive of life. By attending to thoſe two general obſervations many diſorders may be prevented.

It will then become neceſiary to obſerve, that no one matter is more capable of generating putrid fevers or fluxes, &c. of the moſt dangerous nature, than the exhalations ariſing from the diſcharges of the human body, pent up or ſtagnated from a want of ventilation;

to this cauſe may be added uncleanlineſs, highly capable of breeding peſt and vermin.

There are numberleſs proofs may be brought to ſupport thoſe aſſertions, from the works of Sir John Pringle, Doctor Donald Monro, Doctor Lind, and many other creditable authors, and when we view the recitals of the *all-worthy Howard*, whoſe indefatigable zeal, prompted by his humanity, led him to the moſt loathſome dungeons in moſt parts of the chriſtian world, we ſhall find that the remedy for moſt evils which happen in places of confinement, is in a great meaſure within our power, particularly in conſtructing new priſons, and in a great meaſure by regulating thoſe already built.

Mr. Howard's journies were not undertaken for his amuſement, nor were his collections

publiſhed

publiſhed for general entertainment; they were the off-ſpring of his benevolence, and the peruſal of his works is recommended to all who have it in their power to alleviate the grievances of the diſtreſſed. Mr. Howard, whoſe name can not be made too frequent mention of, ſays, " Thoſe Gentlemen, who " when they are told of the miſery which our " priſoners ſuffer, content themſelves with " ſaying, Let them take care to keep out, pre- " faced perhaps with an angry prayer, ſeem " not duly ſenſible of the favour of Provi- " dence, which diſtinguiſhes them from the " ſufferers; they do not remember, that we " are required to imitate our gracious heavenly " parent, who is kind to the unthankful and " the evil; they alſo forget the viciſſitudes of " human affairs; the unexpected changes to " which all men are liable; and that thoſe " whoſe circumſtances are affluent, may in

" time

" time be reduced to indigence, and become " debtors and priſoners."

The committee of the houſe of commons, appointed to enquire into the ſtate of the priſons of this kingdom, (of which Mr. Holmes * was chairman) was pleaſed to call on me to furniſh them with whatever information I could give, relative to that ſubject; with this requeſt I moſt chearfully complied, and have preſumed to ſtate my opinion in reſpect to the general cauſes of gaol diſorders, and other miſeries attendant on confinement, to them, which they have honoured with a place

* Whatever portion of praiſe is due to Mr. Howard, it is with unſpeakable pleaſure I can aver, that benevolence is not confined to the ſoil of Britain; Ireland can boaſt of her Howard, in the perſon of Mr. P. Holmes, whoſe indefatigable aſſiduity in his endeavours to mitigate the hardſhips of the unfortunate, muſt ever meet with the approbation of his country

place in their report of the ſeventeenth of December, 1783.

I then ſtated, that the inſecurity of gaols is the greateſt cauſe of the general hardſhips that priſoners labour under; as the gaolers in weak priſons think themſelves obliged to have recourſe to dungeons and irons, to prevent their eſcapes; of this fact, I mentioned ſeveral inſtances within my knowledge. I likewiſe ſtated the unwholeſomeneſs of priſons, chiefly to ariſe from an impropriety in their ſituations, and an incorrectneſs in their ſtructure, owing as well to the ill-choſen materials of which they are built, as to their form, confined rooms and cells, generally damp and below the ſurface, where they cannot have the benefit of ventilation; uncleanlineſs, bad lying, often on the cold damp ground, without ſtraw or covering, improper and unwhole-

ſome

ſome food, the want of court-yards and neceſſary houſes, all which inconveniencies highly promote putrefaction; particularly ſo, as they are obliged to ſubſtitute tubs in the place of privies in their cells and priſons, which are cleanſed at the diſcretion of the gaoler, and this ſeldom happens until the keepers noſe is offended by the exhalation. The want of exerciſe, and melancholy ſtate of mind in which priſoners generally are, contribute to produce many complaints, but as this laſt is irremediable, a greater degree of precaution becomes neceſſary.

Although it may not appear neceſſary to many gentlemen to ſtate the numerous caſes which have fatally occurred from confined air, and unwholeſome ſituations; the general aſſertions being univerſally admitted; yet I muſt beg to be excuſed for treſpaſſing on my readers

readers leiſure, in reciting from the beſt authorities a few obſervations in ſupport of what has been here aſſerted, and which many recent inſtances, even in this country have fatally evinced.

Baker in his Chronicle, page 353, that hiſtorian mentioning the aſſize held at Oxford Caſtle, 1577, (called from its fatal conſequences the black aſſize) informs us, that all who were preſent died within forty hours: the Lord Chief Baron, the Sheriff, and about three hundred more.

Lord Chancellor Bacon aſcribes this to a diſeaſe brought into court by the priſoners, and Doctor Mead is of the ſame opinion.

The firſt of theſe two authors, Lord Bacon, obſerves, that " the moſt pernicious infection

" next the plague is the ſmell of the gaol;
" when priſoners have been long and cloſe,
" and naſtily kept."

At the lent aſſize in Taunton, 1730, ſome priſoners who were brought thither from Ivelcheſter gaol, infected the court, and Lord Chief Baron Pengelly, Sir James Sheppard, Serjeant, John Pigot, Eſq; Sheriff, and ſome hundreds beſides, died of the gaol diſtemper; the numbers that were carried off by the ſame malady in London, in 1750, two Judges, the Lord Mayor, one Alderman, and many of inferior rank, are too well known to need the mentioning further particulars.

In 1756, at Calcutta, in Bengal, out of 170 perſons, who were confined in a hole there, one night, 154 were taken out dead. The few ſurvivors aſcribed the mortality to

a want

a want of freſh air, and called the place from what they ſuffered,—Hell in miniature.

Doctor Lind * aſſerts, that " the ſources " of infection to our armies and fleets are " undoubtedly the jails; we can often trace " the importers of it directly from thence, " and it often proves fatal † from impreſſed " men, on the haſty equipment of a fleet. " The firſt Engliſh fleet ſent the war before " laſt to America, loſt from this cauſe above " 2000 ſeamen," he likewiſe aſſures us, " that " the ſeeds of infection were carried from the " guard ſhips, into our ſquadrons; and the " mortality thence occaſioned, was greater " than by all other means of death put to- " gether." ‡

* Eſſay on the Health of Seamen. † Page 307. ‡ Page 5.

Sir John Pringle, in his treatiſe on diſorders of the army, remarks, that in proportion to the long continuance of camps on the ſame ground, though otherwiſe an wholeſome ſituation, the malignity of diſtempers increaſe, in conſequence of the putrid exhalations which naturally ariſe from the diſcharges of the human body, notwithſtanding every pains that may be taken to keep the camps clean, the ſewers cleanſed, new privies frequently opened, and the old ones covered up. In ſpeaking of the campaign of 1743, in Germany, he points out the neceſſity when even an infectious complaint appears, of changing ſituations, as from the retentive quality even of the ſtraw, the putrid matter or leven is ſo compleatly retained, that every attempt to guard againſt the evil has proved ineffectual. He gives ſo many inſtances of this in his ingenious and elaborate

rate treatiſe, that they alone are ſufficient to prove the neceſſity of adopting ſome regulations, for the future preſervation of the human ſpecies.—Policy requires it—humanity prompts it.—He mentions that ſome of the old tents of the army, which were ſent from Germany to Ghent (and had been uſed for bedding by ſome of the men who were ill of an highly malignant fever and flux,) were ordered to be refitted, and were accordingly put into the hands of a tradeſman at Ghent; who having employed twenty-three Flemiſh journeymen about the work, * loſt ſeventeen of them by the diſtemper, though they had no other communication with the infected: the original fever and flux, by which great numbers were carried off, was cauſed by unwholeſome damp air, and crouded

* Pringle on Diſeaſes of the Army. Page 26, 27.

rooms.

rooms. Amongſt the extraordinary havocks made by the gaol fever, † he mentions, that in the year 1745, when Ligonier's and Price's regiments landed in Holy Iſland, both had embarked in good health, after leaving their ſick at Antwerp; ſome of which were in the gaol fever. Of ninety-ſeven men taken out of the ſhips, who had received the infection, forty died, and the people of the place attacked by the ſame diſtemper, in a ſhort time buried fifty, the ſixth part of the inhabitants of that iſland ‡.

Through the whole of his treatiſe, we find that the men were every where healthful in proportion to the openneſs of the country, the dryneſs

† Every malignant fever which takes its riſe from crouded rooms, cells, dungeons, or even camps, in cloſe ſtill weather, whether the atmoſphere is as it were ſtagnated and replete with putrid exhalations, may be conſidered as gaol fevers.

‡ Pringle. Page 40.

dryneſs of the ſeaſons, their frequent movements from camp to camp, their comfortable means of lying, and the ſpaciouſneſs of their apartments.—and *vice verſa.*

He likewiſe obſerved, that no one cauſe promoted putrefaction more than the moiſture cauſed by the inundation in Dutch Brabant, which had been made about the fortified towns, and ſenſibly became more noxious on letting off part of the water in the beginning of Summer, after the preliminary articles of the peace were ſigned in 1748. For theſe grounds, which were once entirely covered, being now half drained and marſhy, filled the air with moiſt and putrid exhalations. The States of Holland being made ſenſible of this, by the ſickneſs which raged at Breda, &c. gave orders to let in the water again, and to keep it up till Winter.

The

The Greys, cantoned at Vucht (a village within a league of Bois-le-duc, ſurrounded with meadows, either then under water, or but lately drained) were the moſt ſickly; for the firſt fortnight they had no ſick, but after continuing five weeks in that ſituation, they returned 150; after two months 260, which was above half the regiment; and at the end of the campaign they had but 30 men, who never had been ill. *

Doctor Lind, tells us, " That there was " erected at Jamaica, a commodious and ex- " cellent hoſpital, at a great expence, for " the reception of the ſick ſeamen in his Ma- " jeſty's navy, on that ſtation, which from " its uſefulneſs and grandeur was called " Greenwich Hoſpital; it was unfortunately

* Pringle. Page 65.

built

" built near a marſh, upon a moiſt, unhealth-
" ful ſpot of ground. Such were the effects
" of this unhealthy ſituation, that when a
" patient was ſent thither, with only a mild
" intermittent fever, this mild indiſpoſition
" was often changed either into a malignant
" fever, bloody flux, or ſome other mortal
" diſtemper. It was obſerved, that the yel-
" low fever often raged there, attended with
" the moſt profuſe evacuations of blood, by
" vomiting and ſtool; and even by every
" pore of the body, when no ſuch ſymptoms
" diſtreſſed thoſe patients whoſe caſes had
" been ſimilar, and who were permitted to
" remain in their ſhips. The recovery of
" patients in that hoſpital, was obſerved to
" be very tedious and uncertain; the leaſt
" irregularity brought on a relapſe. After a
" flux had been ſtopped for ſome days, the
" eating of any ſort of food, which had a

" putrid tendency, even a meſs of broth,
" would ſometimes, in a few hours, bring on
" a return of the diſeaſe, accompanied with
" all its violent ſymptoms; neither did this
" proceed from any ſource of infection in the
" hoſpital, or from its being too much crowd-
" ed with patients; theſe things happened
" even when a ſmall number of patients
" were lodged in the beſt aired, and in the
" cleaneſt wards. The mortality in this
" houſe was ſo great, and the cauſe of it ſo
" obvious, that there was a neceſſity for de-
" ſerting it. No more ſick were permitted
" to be ſent thither, and another hoſpital, in
" better air, is now fitted up for their re-
" ception." *

Many other proofs may be brought from the works of thoſe gentlemen mentioned,

* Lind on Diſeaſes incidental to Europeans in hot Climates, Chap. 1. Page 191.

and

and from other reputable authorities, to prove the abſolute neceſſity of attending in future to the ſituation, as well as to the ſtructure of all public buildings; but, more particularly to thoſe of Gaols, than to any other ſort of edifices, as here, we have melancholy, dejection, apprehenſions of the moſt awful nature, the conſequences of ſcanty allowance, and want of pure air and exerciſe to contend with; which ſeparately, or conjointly, are capable of producing the worſt complaints.

The generous public will excuſe my omitting to mention particularly, the names of many uſeful and worthy members of ſociety, who not long ſince, have been ſnatched away by the conſequences of gaol infection, in this country. I would be only tearing open afreſh the wounds of individuals,

who, like me, lament the loſs of their patrons and benefactors; and ſhould each individual throw in his mite, for the information of the public, it would be only exerciſing that duty which is incumbent on them, as members of ſociety, who aſpire to the character of good citizens, mine, ſuch as it is, is at their ſervice.

I preſume, ſufficient has been mentioned, to ſhew, even if no mercy was due to priſoners, that to prevent gaol diſtempers (which are more fatal than the plague, proportioned to the numbers they attack) is a national concern of no ſmall importance; the neceſſity of attending to this object, appears by every day's accounts from our ſiſter kingdom, where numbers are carried off by gaol diſorders.

It would not ſeem ſo neceſſary to lay down any general rules in reſpect to gaols, were not the greateſt errors committed in thoſe lately built.

The objects which ſhould be attended to in conſtructing gaols, the manner of airing them, and accommodating the unfortunate criminals, with whatever may render their ſituations leſs inſupportable, and the means of conſulting the ſafety of thoſe who are obliged to ſuperintend them, ſhall be the buſineſs of the remainder of this work.*

Their ſituations ought to be lofty, and, if poſſible, on a limeſtone gravel, in the vicinity of ſome running water, which may

* Many of the old gaols may be ſo regulated (without rendering them leſs ſecure) as in a great meaſure to effect the wiſhed for intentions, without much expence.

anſwer

anſwer to keep the ſewers cleanſed, the floors clean, and the priſons in warm weather refreſhed, A ſoutherly aſpect is likewiſe moſt eligible; and light which is ever attended with a certain portion of fire, neceſſary to deſtroy the unwholeſome damps, which favour putrefaction, and render the air unfit for reſpiration, ſhould have acceſs to the places of confinement.

The moſt eligible ſituation for a priſon, if it could be procured with the advantage of water, &c. is the ſide of a hill, or riſing ground, which would naturally direct the air, as it were, in ſtreams, and the more compleatly ventilate it: it is likewiſe obſerved, that an inequality of ſurface favours the motion of the air; when on the flats or level plains it is nearly in a ſtagnant ſtate. The ſtream interrupted in its current, from the inequality

of

of its bed, will have the advantage over ſtill waters, (which in warm weather become tainted,) and even over the deep ſmooth ſurfaced river, which though pure will not court the refreſhing breeze, that is ever an attendant on the unequal ſurface of briſk moving waters*. Care ſhould be taken that no part of the ground on which the priſon is built, ſhould, at any time, be ſubject to floods or underwater, as the greateſt evils ariſe from the vapours that are produced by warmth, from marſhy grounds, cells, &c. ſo circumſtanced; but more particularly from the mud or ooze remaining, after the waters recede. It will likewiſe be adviſeable to a-

* The wave-like ſurface will continually ſtrike againſt (and ſo put in motion) the adjoining column of air, this will move that portion immediately in contact with it, that, the next, and ſo on, *ad infinitum*; ſo that the contiguous atmoſphere by this perpetual concuſſion, may be conſidered ventilating.

void

void building in the vicinity of burial grounds, ſlaughter-houſes, or any place which poſſibly may taint the air with putrid exhalations, nor ſhould it be built in the crouded parts of either city or town.

Mr. Howard has given a general plan for the conſtruction of priſons, in which he is accurate, and like himſelf, ever attentive to the diſtreſſes of the wretched; but, whereas the intention of this ſmall treatiſe, is, to point out what by a more ſkilful perſon may be brought to real perfection; I ſhall refer my readers to his treatiſe, and content myſelf with mentioning a few matters abſolutely neceſſary to be attended to.

The halls or chambers of priſons ſhould be lofty, that the foul air, which always aſcends, may be out of the reach of their breathing,

breathing, and that the body may exiſt in an active elaſtic element.

Their beds ought to be raiſed from the floors, their ſtraw frequently changed, and their bed clothes from time to time aired abroad. The priſoners ſhould be aired in ſome yard or garden every day, particularly in cloſe, damp, or very warm weather; and, at times bathed. The air of priſons ought to have acceſs FROM below (but ſo * contrived as not to cool the priſoners too much, which is eaſily effected) and the upper part of the priſons may have paſſages for the foul air to eſcape by, in two different directions, leſt the wind by blowing from a particular point, ſhould impede the air in its paſſage

* Oppoſite the paſſages for the air to enter, there may be a ſmall breaker or abutment, which will prevent the air from paſſing through the priſons in a ſtream.

from within. To remove or expel the foul air, when the atmoſphere is very ſtill, and as it were ſtagnant, may be effected either by lighting fires in the priſons (which ought to have chimneys,) or by a very ſimple machine, calculated to draw in freſh air, and expel the foul: the fire will anſwer better in moiſt weather, particularly if the air is cool, as along with bringing in a current of freſh air by its rarefaction, it will beſtow a neceſſary quantity of its fire to it, ſo as to render it fit for breathing, at the ſame time that it deſtroys the unwholeſome damp of the walls, floors, &c. But in warm, ſtill weather, the air machine will be preferable, as it will refreſh, and cool, whilſt it expels the foul air.

The machine intended, is of the moſt ſimple conſtruction, being nothing more than

that part of the common farmers winnowing machine or corn-cleaner, which draws in a quantity of air, ſufficient by the velocity it receives from ſmall wings annexed to a ſlender axis, to blow off the chaff to a great diſtance. The method of uſing it, is to have a leather tube annexed to that part by which the air is ſupplied, the other end of which may be placed in the common air hole of the priſon, or window. One of the priſoners may turn the axis by its handle, and it will draw in ſuch a quantity of freſh air in a minute, through a leathern tube of three inches diameter, as would refreſh a large cell. This has the advantage of moſt machines from its ſimplicity, and may be purchaſed for eight ſhillings.

As to the idea of ventilating by the common wheels in doors or windows, it is abſurd,

for when they are moſt wanting, from the ſtagnant ſtate of the air, they will not play.

The neceſſaries ought to be contrived in ſuch a manner, on the different floors, as not to become annoyances, which of all others are the moſt dangerous; want of attention to this, has formerly been of the moſt dreadful conſequences, even in camps, where advantages might have been expected, from the operation of the open air; and the like probably will happen, if they neglect to remedy thoſe of the new priſon.

The greateſt attention ought to be paid to the choice of ſtone, * either for the flagging or

* It is well known that limeſtone becomes moiſt, on every change of weather, from dry to wet; whether this depends on its beſtowing its latent fire to the atmoſphere, that kept the portion

or walls of priſons, leſt they become moiſt on every change from dry to wet weather, as no one thing is more unwholeſome, being one of the principle cauſes of putrefaction. Every precaution ought likewiſe be taken with reſpect to the lime and ſand, uſed in the mortar for the inſide work.

The priſons ought to be frequently cleanſed, and in warm weather, if the air is very dry, it will render them wholeſome to have them ſprinkled with water every day, before

tion of water in a ſoluted ſtate, which is a conſtituent part of common air, and may be introduced into the pores of the ſtone; or whether the water of the atmoſphere air being no longer perfectly ſoluted, is attracted by this ſpecies of ſtone, is not material—the fact is ſo; therefore, this ſort of ſtone is improper, particularly, in the inſide work; but if it ſhould be impoſſible to procure any other without an immoderate expence, the walls may be lined, and the floors laid with brick. The beſt and firmeſt mortar is prepared of quick lime and ſharp river gravel, or bank gravel well waſhed, ſo as completely to deprive it of its loam.

they

they are bruſhed out. They ought to be white waſhed at leaſt twice a year.

Whenever a priſoner is committed, previous to his entering the common gaol, he ought to ſuffer an examination, leſt he might labour under any infectious complaint, which might endanger the other priſoners; or leſt from a diſpoſition in himſelf to dropſy, aſthma, &c. the common place of confinement might endanger his life, the loſs of which would defeat the intention of the law, whilſt it enforced the firſt of cruelties, in reſpect to the individual.

Whenever there is even an apprehenſion of infection likely to prevail, particularly in July and Auguſt, the number of priſoners in the ſame room ought to be diminiſhed; the moſt airy dry parts occupied; they ought

to

to be aired abroad, kept clean, and even if convenient, bathed; to wait for the attack would be unwiſe. Whenever a priſoner is taken ill, whether the complaint is conſidered infectious or not, it will be prudent to have him removed to ſome other apartment, or to the hoſpital, where a greater degree of attention may be paid him: but if the complaint ſhould be of the epidemic kind, it will be adviſeable likewiſe to remove the other priſoners to ſome other rooms, leſt they might be infected by remaining in the priſon where the complaint firſt made its appearance; and all poſſible communication ſhould be cut off, between thoſe infected and the reſt.

Every days experience proves, that diſorders not otherwiſe infectious, will become ſo, by not keeping the ſick clean, and their apartments aired.

It frequently happens, that notwithſtanding there is a particular effluvia, or infectious matter, neceſſary to generate certain ſpecies of epidemical complaints, without which no conſtitution of the air can bring them about, (ſuch as the ſmall-pox, meaſles, &c.) yet we daily experience, that from a confined pent up air, particularly if charged with morbid exhalations, diſorders become infectious, which otherwiſe, were the precautions mentioned made uſe of, probably would not happen. How ſeldom do we find, when either a common fever, (which is in general an effort of nature) or a ſimple diarrhæa attacks the poorer ſort, that it does not run through the whole family? fever begets fever, and that which was but a mere lax, by having the air charged with exhalations of a fetid nature, and rendered more acrid and active by the warmth and confinement of the chamber, will beget a dyſentery or flux.

As it has been obſerved that contagions, as they ariſe from ſubſtances, which contain or retain the infectious principle, ſuch as cotton, cloth, &c. are more fatal than thoſe ariſing from the human body, it will be prudent to bury ſuch cloathing, or beding, as they had in uſe, immediately after a fever is over, that they may rot, which will anſwer better than burning; this does not ſo effectually deſtroy the nature of the infection. In the ſubſtance, whilſt in the act of diſſolution, a fermentation is brought about, which alters the quality; but by being burned, it is rather divided and diſperſed; and in ſome degree infectious matter may acquire an activity from the fire, which might the better enable it to exert its baneful influence, even at remote diſtances, if not altered by ſome decompoſition inſtituted by Providence.

It will be prudent to bath the priſoners before they come to court, and to have a certain number of ſhirts, ſhifts and cloathing, of a cheap kind for them to dreſs in, before trial, (which may be kept for the purpoſe.) They ſhould likewiſe be aired, previous to their coming into court, by walking them ſome diſtance in the open air: this will be the more neceſſary, if the priſon, and court, are under the ſame roof, (which is the caſe in many towns in the kingdom,) for then they loſe the benefit of the ventilation, which they would neceſſarily undergo, by walking any diſtance through the open air.

A great advantage will attend the court, merely from the confidence they will have in not riſquing any danger, for there is no

one

one ſtate that ſo much diſpoſes the body to catch infection, as a fearful one.

Human exhalations long pent up, preſumes an infectious matter preſent, and nothing wanting but a diſpoſition to catch it, therefore, the argument, that there is nothing to be apprehended, becauſe no diſorder has as yet appeared, is nugatory: perhaps thoſe accuſtomed to breath pure air, will riſque more than thoſe confined in the priſons; for providence may exert in ſome manner her preſerving power in favour of life, to prevent the operation of infection, where ſhe knows it cannot be avoided,—ſhe contracts or expands the ſight of the eye, and ſo adapts it to the quantity of light.—Ergo.

It has been obſerved, that infection as well as mortality prevail leſs in upper than

lower rooms; therefore, the impropriety of dungeons, or any places of confinement below the ſurface, is obvious; and as moſt eſcapes are made by undermining the priſons, Quere,—according to Mr. Howards idea in the conſtructions of new priſons, would it not for ſecurity as well as health, be adviſeable to have the priſons raiſed over arcades? which will render them more airy, and leave under them a dry walk in wet weather.

My mentioning the abſolute neceſſity for cleanlineſs, ariſes from a conviction of its utility, and as moſt authors of credit place to the account of filth, and putrid exhalations, the principle part of the moſt malignant diſorders, one part of the Gaoler's duty ſhould be, to ſee that the priſons are ſwept every day, that no ſort of matter capable of producing ſtench, or other annoyance, ſhould

be

be left to exhale its noxious vapour: for here we have not the ſame opportunity of changing ſituations, as they have in camps, and even in them * the worſt conſequences ariſe from putrid effluvia; notwithſtanding they have the benefit of open air; and from the conſtant movements of both men, horſes and carriages, it is kept in a ſtate of motion.

We even find that Moſes enjoined cleanlineſs in the camp of the Jews, when he ſays,—" Thou ſhalt have a place alſo with-
" out the camp, whither thou ſhalt
" go forth abroad, and thou ſhalt have a
" paddle upon thy weapon, and it ſhall be

* Si autumnali, eſtivoque tempore, diutius in eiſdem locis militum multitudo conſiſtat, excontagione aquarum, et odoris ipſius fæditate vitiatis hauſtibus, ære corrupto, pernicioſiſſimus oriatur morbus, qui prohiberi, non poteſt aliter, niſi frequenti mutatione caſtrorum.---Veget. de re militari, liber 3. cap. 2.

" when

" when thou wilt eaſe thyſelf abroad, thou " ſhalt dig therewith, and ſhalt turn back " and cover that which cometh from thee, " for the Lord thy God, walked in the midſt " of thy camp; therefore ſhall thy camp be " holy, that he ſee no unclean thing in thee; " and turn away from thee." *Deut.* chap. xxiii. ver. 12, 13, 14.

The obſervations of all modern writers, and of many antient authors, ſhould caution us againſt permitting too great a number of people to continue for any length of time, in apartments where pure air cannot have an eaſy acceſs; and without their being refreſhed with clean linen. When the diſcharges of the body are long pent up, they acquire ſuch a degree of virulence, that Doctor Hales, Sir John Pringle, and others, have obſerved, that air corrupted and putrefied, is of ſo

ſubtil

ſubtil and powerful a nature, as to rot and diſſolve heart of oak; and that the walls of buildings have been impregnated with this poiſonous matter for years together: nay, we read in holy writ, that the plague of leproſy was retained in the walls of houſes.*

The humane Howard mentions, that in his firſt journeys, his cloaths were ſo offenſive, that he could not bear the windows of his carriage drawn up, and was therefore often obliged to travel on horſeback; the leaves of his memorandum-book were often ſo tainted, that he could not uſe it until after ſpreading it an hour or two before the fire; and even his antidote, a viol of vinegar, has after uſing it in a few priſons, become intolerably diſagreeable. I have frequently experienced that a ſilver cup or

* Leviticus chap. 14. ver. 35, &c.

ſalver left two days and nights in crouded damp priſons, have become of a dark colour, with a greeniſh hue, or of ſuch a ſhade as ſilver probes or tubes are tinged with, which are uſed in dreſſing ill-conditioned ſores, or the moſt malignant ulcers.

The wiſe precautions recommended by a late author of credit, in reſpect to the army, ſhould in a greater degree be attended to by gaolers, when they can be executed with ſafety and convenience. Soldiers have leſs to apprehend from confinement, melancholy, bad lying, ſcanty food, and wretched cloathing, than priſoners; their duty affords them moderate exerciſe, than which, nothing conduces more to health; they enjoy the benefit of pure air, whilſt filth, which is generally attendant on moſt priſoners, the parent of peſt and vermin, is incompatible with

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the idea of a proper ſoldier; yet we find that the general orders are, that the Quarter-maſters who go before the troops, ſhall take particular care to have the barracks very clean, dry, and well aired. Every morning when the men are brought to roll-calling, ſays Doctor D. Monro, their beds ought to be made, the rooms bruſhed out, and the doors and windows left open, the open ſewers ſwept, and every other neceſſary precaution made uſe of to prevent the leaſt offenſive ſmell. Their ſtraw ought, if not in caſes, to be turned every day, they ſhould likewiſe be ſupplied with firing not merely for common culinary purpoſes, but for airing the rooms. The warmer the ſeaſon, the fewer men ought to occupy each room, and Sir John Pringle obſerves, that all damp houſes, particularly their firſt floors ought to be re-rejected.

Portius Romazini, Doctor Mezery, Tiſſot*, Buchan, and other authors of great credit, as well as thoſe of whom I have made mention, attribute moſt camp and peſtilential complaints, to a variety of putrid exhalations and noxious effluvia, ariſing from excrementitious diſcharges of men as well as beaſts, and often from marſhy grounds, which emit their poiſonous vapours to the deſtruction of

* Tiſſot, in his advice to the people, page 23. after mentioning the fatal effects of exhalations which ariſe from marſhy grounds, particularly from thoſe, which of late were covered with water or ooze, but had in ſome meaſure been drained; ſays,—"to this cauſe, may be added the neglect of the peaſant to air his apartments: it is well known that too cloſe an air occaſions the moſt malignant fevers; and the poor country people ſeldom reſpire any other in their houſes; they often incloſe in narrow contracted apartments, the father, mother, ſix or eight children, beſides ſome animals; they are never kept open during ſix months in the year, and very ſeldom during the other ſix. He ſays, he has found the air ſo bad in many of their houſes, that he was perſuaded, if their inhabitants did not frequently go out into the free open air, they muſt all periſh in a ſhort time."—Stagnant air will ſoon corrupt.

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the vital principle. Of the numberleſs proofs that may be brought to ſupport the idea of noxious exhalations ariſing from the earth, (particularly diſpoſed,) I ſhall beg leave to mention one extraordinary inſtance, which was related to Doctor D. Monro, by J. Graham, Eſq; who has an eſtate in the iſland of Grenada.

Soon after the Britiſh troops took poſſeſſion of the iſland, on the peace concluded in the year 1763, a party of ſoldiers was ſent to lodge in ſome houſes of a Monſ. Rochard's plantation, ſituated on a dry riſing ground, and on the windward ſide of the iſland, and therefore believed to be a very healthful ſituation; all the men of this party died, which was attributed to their having marched twenty-two miles one day. A ſecond, and a third party was ſent ſucceſſively, to take up the

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ſame quarters; and in order to avoid what was imagined to be the cauſe of the fever, which had been ſo fatal to the firſt party, they were ordered to make three days march of the twenty-two miles, but they all ſhared the ſame fate: Theſe repeated misfortunes made the commanding officer ſearch for other cauſes, when it was diſcovered, that there was a marſhy ſwampy ground lay between the plantation where the ſoldiers were quartered and the ſea, and that the moiſt putrid exhalations from thence, carried by the ſea breezes to the quarters of the men, had been the cauſe of all the ſickneſs and mortality. The diſcovery of this circumſtance, prevented any more of the military being ſent to that place.

To a ſimilar cauſe may be attributed the unhealthfulneſs of the hoſpital at Jamaica, for

for notwithſtanding it was erected four miles from Port-Royal, on a dry ſpot of ground, clear of woods, and which roſe by a gradual aſcent, for about a quarter of a mile from the ſea, yet it unfortunately was full in the draught of a land-wind, which came over a large extenſive marſh, on the banks of a freſh water river, at about the diſtance of two miles; this rendered the hoſpital ſo unhealthy, that few eſcaped the fatal conſequences mentioned. That this land-wind, impregnated with moiſt putrid exhalations, was the cauſe of all the grievances related, is evident, from all the plantations which ſtood in its draught being unhealthy, while thoſe ſituated out of it, though but at a very ſmall diſtance, were extremely wholſome, and the ſick recovered when they were ſent to them.

One of the great diſtinctions made by meta phyſicians, between the human ſpecies and the brute creation, is, that the former has it in their power by the gift of Divine Providence, not only to proceed from one improvement to another, for the preſent advantages of life, but wiſely to adopt their operations ſo as to guard againſt whatever may be diſcovered to have a tendency to render their works leſs perfect, or their intentions abortive. This being admitted, how eagerly ought we to embrace every method which can be deviſed, towards the further preſervation of the ſpecies?

The neceſſity of attending to proper ſituations for priſons, is evident; and although it may be ſaid, that we have not ſo much to apprehend from ſituation, as thoſe who inhabit wooded or marſhy countries, and where

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the ſun has greater influence in raiſing vapours, and rendering them more noxious and active by its heat, yet we every day experience, that even in this country, there is no one matter more eſſentially neceſſary to be attended to. Thoſe who will for a moment, turn their thoughts on the general effects of different ſtates of the atmoſphere, on the human body, will readily conceive what extraordinary changes may take place in our frames, by its immediate tranſition from heat to cold, from dry to moiſt, &c. but when we reflect on the ſudden alteration which takes place in us, if affected by a diſagreeable ſmell, the languor on our ſpirits, inclination to faint, defect of briſk circulation, &c. what are we not to ſuppoſe of their ſufferings, who are ſhut out from the light of Heaven, deprived of the pure air, ſo bountifully beſtowed by Providence; loaded with

irons;

irons; bedewed with unwholſome vapours; perhaps that inſtant impregnated with the diſcharge of putrid lungs; their bodies not half covered; no place to reſt their languid frame, but a naked damp floor, ſcarce coated with ſtraw, the vital ſpark almoſt extinct (in ſo much as it depends on proper food,) and the horrors of either a capital puniſhment, or long impriſonment hanging over them?

To ſuppoſe that priſoners are not ſuſceptible of the ſame feelings with ourſelves, implies, that the loſs of ſenſation in them, depends on their having been habituated to the ſtench, and of conſequence do not perceive it; or what is ſtill worſe, that the ſenſitive faculties in general are ſo blunted, that their powers of diſtinguiſhing are compleatly done away.

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The legiſlature having found confinement neceſſary, in the exerciſe of juſtice on criminals, did not however mean to blunt their feelings, or render them deſperate; the primary idea of impriſonment, is keeping the criminal in ſafe cuſtody to anſwer to the ſtate, whoſe laws he tranſgreſſed; humanity tells us, that the ſecondary idea is, to harrow up his ſoul with the thoughts of future puniſhment, and ſo render him penitent; and how can this end be ſo effectually obtained, as by keeping his body in good health, on which depends the exquiſiteneſs of that ſenſibility, which will awake in him, the proper degree of alarm, ſo neceſſary to his ſituation?

To obtain a pure air in priſons, without clean cloathing for the confined, and a proper attention in the gaoler, or ſome other perſon who will viſit the priſoners frequently,

is, more than can be expected, for if their linen is not frequently changed and waſhed, the diſcharges of the ſkin being long retained in their cloathing, will become more acrid, active and virulent, and by the heat of their bodies, are in ſome meaſure ſo ſharpened and volatiliſed, that they pervade and erode the hardeſt ſubſtances. Foul linen ſtops the pores of the ſkin, and checks perſpiration, of courſe, that excrementitious diſcharge, acrid in its nature, by being checked, is frequently thrown on the internal organs, whoſe functions it either injures or deſtroys; and by being depoſited on the muſcular or tendinous parts of the body, cauſes pains, contractions, diſtortions, incapability of movement, &c. under this circumſtance, the moſt generous diet will ſcarce ſupport the frame, for the retained acrid perſpiration will ſo alter and contaminate the mild nutritious matter, in-

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tended as the conſtant pabulum for our waſting bodies, that in place of reſtoring to the parts what they every moment loſe (by the conſtant wearing down, cauſed by the friction, which takes place between the fluids and other parts of the body) it will rather, by partaking of the perſpirable acrimonious nature, tend to emaciate, and conſume by a ſlow fever.

How many do we find in a ſtate of decay amongſt the better ſort, from the defect of peſpiration, notwithſtanding they enjoy the comforts of life, in as much as cloathing, diet, air; exerciſe and a quiet mind can conduce towards them? yet in vain do we wait their recovery, except the perſpiration is reſtored; hence ariſes the neceſſity of applying flannel to the ſkin, uſing frictions, recommending warm climates, ſu-

dorific drinks, and every other matter which may induce the peſpiration to exude by its natural paſſages.

Another evil which frequently attends the defect of peſpiration is, an inveterate itch, or tormenting raſh, on the ſurface of the body; for we cannot ſuppoſe that the ſaline acrid particles of the blood, diſcharged by perſpiration, can be long detained in the veſſels of the ſkin, without corroding them, and exciting the diſagreeable ſenſation too often felt, and too well known to require any explanation.

The *obſerving Howard*, in ſpeaking of the priſons at Paris, mentions, that the daily allowance to criminals, is one pound and an half of good bread and ſoup; they have clean linen once a week, from a ſociety, which

was

was inſtituted about the year, 1753. The occaſion of it was the prevalence of a contagious diſeaſe which in France they call the *ſcorbut*,—the *ſcurvy*. This diſtemper was found to proceed from priſons; and to ſpread in the *Hotel Dieu*, whither priſoners that had it were removed: the cauſe of it was generally thought to be want of cleanlineſs in the priſons; where many of thoſe confined had worn their linen for many months, and infected the moſt healthy new-comers, that were put into the room with them. Eight hundred were ill of it at once, in the hoſpital of *Saint Louis*, to which all that were ſick of it in the *Hotel Dieu* were carried. By the *Abbe Breton*'s exerting himſelf on this occaſion, a fund was raiſed to ſupply priſoners in the *grand Chatelet* with clean linen every week. This put an effectual ſtop to the malady in the priſon.

Numbers

Numbers afterwards joined the ſociety; the King and Queen honoured it with their contributions, and the charity extended to three other priſons; ſo that at laſt ſeven hundred priſoners, were provided for in the ſame manner, and a ſtock of linen, requiſite for that purpoſe: viz. five thouſand ſhirts, was compleated. The elder priſoners have charge of the linen that is in the priſon; they receive, and return it, and are gratified by the ſociety; which continues to the preſent time. Beſides this, there is ſcarce a priſon in the city, or in the provinces, that has not a patroneſs; * a lady of character, who voluntarily takes care, that thoſe in the infirmaries be properly attended; gives them firing; and ſupplies them and the felons in dungeons with linen; does many kind of-

* Treſoriers ou Dames de charité.

fices

fices to the priſoners in general; and by ſoliciting the charity of others, procures not only the relief and comforts mentioned already, but ſoup twice a week, and meat once a fortnight. There is alſo annually, at each priſon, ſomething like our charity ſermons;—public ſervice in the chapel, and a collection.

If the ſmalleſt ſpark of pity exiſted in the heart of man, it would be fanned to glowing compaſſion, in favour of hundreds of our unfortunate priſoners, deſtitute of every comfort of life, and particularly of the means of cleanlineſs, as not one half of them, in the many priſons which I have inſpected, can boaſt of a ſecond ſhirt or ſhift, ſo that the only time, for the ſpace of ſix months, that they have a change of linen, is perhaps previous to trial, and even then, this does

not

not always happen; * as ſome of the unfortunate creatures have not a ſingle one.

What ſecurity, under ſuch circumſtances, can a court have againſt infection? I repeat again, that if the ſpirt of charity was extinct, policy demands an attention to priſoners;

* In the county gaol of Kilkenny, there is at this time a man confined under rule of tranſportation, who was convicted three years paſt of being a notorious White Boy, but from ſome circumſtances which appeared, his ſentence was remited, provided, he would tranſport himſelf for ever, from his Majeſty's dominions in Europe, within ſix months: with this the unfortunate fellow has not been able to comply; nor, is there, I believe, any place to ſend him to, nor could he procure bail for the performance thereof. He is yet confined in the cell double bolted, where he juſt exiſts, for from having been an able ſtrong man, and the terror of the country, he is become emaciated, and his body covered with a ſcaly eruption, and has not had a change of linen theſe ſeventeen months, nor was the remains of his raged ſhirt, by what I have heard, removed from his body, ſince that period, but twice laſt ſummer and harveſt, for the purpoſe of deſtroying its tormenting inhabitants. On mentioning this deplorable caſe to a charitable lady, five miles diſtant from Kilkenny, ſhe enabled me to procure him a few ſhirts, &c.

we imitate France in our faſhions, let us emulate her, in humanity. The characteriſtic of an Iriſh ſoul, is,—benevolence. Let us for a moment reflect on Iriſh generoſity, marked by her unprecedented attention to foreign priſoners of war, of every nation, but more particularly by her late bountiful and timely contributions, to redreſs the grievances of the Weſtindan Iſlands,- ſwelled by the unparalleled donation of a *Latouche,* whoſe name to future munificence will, be proverbially added: thoſe who conſider the generous diſpoſition of Iriſhmen, will have every reaſon to believe, that the only thing wanting to put into execution this laudable undertaking, relative to the redreſs of priſoners, is, to have a proper plan laid down, and ſome method ſtruck out, which may be effectually executed, to the ſatisfaction of the public.

Notwithſtanding that there is no part of the world in which the laws are better executed than in France, yet it was found, that the beſt regulations were liable to abuſe, and that priſoners were not ſufficiently provided for, by the enaction of the beſt laws, except, the execution of them was attended to. The ſubſtitutes of the Attorney General viſit the priſons once a week, to inquire if the rules are obſerved; to hear the complaints of priſoners; to ſee if the ſick be properly attended; &c. beſides this, the *Parliament* of *Paris* ſends to all the priſons five times a year, two or three *Counſellors*, with a ſubſtitute of the Attorney General, and two clerks. The arrival of this deputation is ſoon announced to every priſoner, and the deputies go without the gaoler or turnkeys, (leſt the priſoners ſhould be awed by them,) into every room or dungeon, and aſk the priſoners,

priſoners, one by one, if they have any complaint to make againſt the gaoler, or his deputies; and ſo inquire into every matter relative to their ſituations; if detained too long without trial, &c. beſides the deputation now mentioned, the parliament appoints to each priſon, one of their own body, a counſellor; they always chuſe a gentleman of fortune and good character: he is called, *Commiſſaire de la priſon*; his buſineſs is much like that of the deputation, and his office perpetual*.

Such is the policy independant of the humanity of that wiſe nation; and ſhall it be ſaid that Ireland, ſo famed for its clemency, and at preſent ſo advantaged by every bleſſing, that harmony, freedom and trade

* Howard on Priſons.

can beſtow; in an age, when bigotry, ſuperſtition and perſecution are fled, and are replaced by toleration, true policy and religion; ſhall it be ſaid, I ſay, that this country alone, will deny every comfort to the wretched, and ſecurity in reſpect to the lives of thoſe, whoſe duty it is to ſuperintend them.—Avert it heaven! we have ample means to ſupply and execute, whatever ſhall ſeem to the legiſlature wiſe and neceſſary. Several ſalutary laws have been made from time to time, to regulate the priſons of this kingdom, but from ſome unfortunate miſtake, or omiſſion, there is ſcarce one of *them perfectly executed*, I beg leave to mention a few of them; one of theſe acts ſtates, " that medical aſſiſtance ſhall be ſup-
" plied, and every other neceſſary for the
" benefit of the infirm and ſick." Others of them ſtate, " that no bailiff or other officer

" ſhall

" ſhall convey any perſon arreſted to any " public, victualing or drinking houſe, with- " out the conſent of the perſon ſo arreſted." Another, ſays, " whereas, many infectious " diſorders are daily produced by the con- " finement of numbers in cloſe priſons, " whereunto there is no back yard adjoin- " ing, and the lives of his majeſty's ſubjects " are endangered, by bringing priſoners into " the public ſtreets, for air; be it enacted, " that every grand jury, at the aſſizes, or " quarter ſeſſions, may be enabled, and they " are hereby required and directed, to con- " tract for, by leaſe, or to purchaſe, a piece " of ground next adjoining the gaol, or as " near as conveniently can be, thereto, &c." another poſſitively " prohibits brewing " in the gaol, or baking; or ſelling of either " beer, ale, or other liquors, to the priſo- " ners." There is another act which ſtates,

" that

" that no gaoler, or perſon employed by him,
" ſhall preſume on any account, to keep in
" the ſame gaol or the yard, or the houſes,
" adjoining thereto, and provided for the uſe
" of ſuch priſoners, any hogs, cows, or other
" beaſt, under a certain penalty :" it is likewiſe poſitively enjoined to the goaler, " to give them clean ſtraw as often as neceſ-
" ſary ;" and the clergyman appointed to the care of the gaol, is required " to diſtribute
" their bread, which ought to be of good
" quality : the men and women are to be
" kept in different wards." Another part of one of the before mentioned acts, ſtates, " that a table of fees which priſoners are li-
" able to, ſhall be hung up in the moſt con-
" ſpicuous part of the gaol and ſeſſion houſe,
" leſt any impoſition ſhould be exerciſed on
" the priſoners, in addition to the legal de-
" mands preſcribed by law.

A perſon

A perſon who has not viſited thoſe gloomy habitations, would naturally imagine that the legiſlature had wiſely provided againſt moſt matters which could diſtreſs, agrieve or otherwiſe render the unfortunate priſoners ſituation intolerable; but on inſpection, he would find, that thoſe ſalutary remedies are ſeldom applied.

He will be much diſappointed when he is told that there is no medical aſſiſtant of any ſort to attend the gaol, and if there is ſuch a perſon, he will find, that he ſeldom attends, except previous to the aſſizes; when he may think it neceſſary to ſpeak to the gaoler, that he may be able to atteſt, that *he* viſited frequently, and had diſtributed medicines agmongſt the priſoners, * he will ſee that

* The attendant, when there is one in the country gaols, is

that there is no hoſpital or room calculated for that purpoſe, or any other ſort of accommodation for the ſick or infirm; but to the contrary, that when a priſoner dies he is often waked, or laid out for a day or two, in the common priſon with his old companions. The unfortunate priſoner in cities, is often hurried to a ſpunging-houſe, which is a compleat tavern, remarkable for every ſort of impoſition and fees, notwithſtanding the act mentioned of the third year of his preſent majeſty.

Many gaols have not yards yet provided, and ſeveral of thoſe that were rented, or purchaſed, are converted to the ſole uſe of the gaoler, into which, he never permits a

is generally an apothecary; and even he, never has I believe, a ſtated ſalary; therefore does not conſider himſelf obliged to attend punctually, to be intitled to his preſentment.

ſingle

ſingle priſoner to walk for the benefit of what it was originally intended, viz. air and refreſhment, except he knows, *for what*.— The pretence for this generally is, that the wall or fence of the yard is not ſecure, though it may be ſufficiently ſtrong.

The act againſt brewing, baking, &c. in priſons is evaded, by the gaolers permiting the priſoners to get in as much as they can pay for; but for this permiſſion a certain duty is paid the gaolers or turnkeys, by the priſoners. When a gaoler has what he calls, *a good bleeding priſoner*, * in his cuſtody, no matter how henious his offence may be;

* As to the diſpoſal of light and heavy bolts, cells, dungeons or good apartments, &c. they are matters conſidered by the gaoler as the perquiſites of office; and to which from cuſtom, he thinks himſelf really intitled, and may uſe diſcretionally, to gratify or puniſh.

he generally converts for his uſe ſome part of the priſon in which he may keep a cow, a pig, or a parcel of fowl, &c. often to the injury of the other priſoners, as well from the crouding of them together, as from having the air tainted by the exhalations which ariſe from the excrements of thoſe animals; and though there may be ſeveral apartments for debtors, a gentleman of the above deſcription, (by renting the beſt rooms in the houſe, from the gaoler,) will be the cauſe of having the other debtors ſo crouded, as to render their ſituations, almoſt intolerable.

The gaolers often let their rooms to lodgers who are not priſoners. The unfortunate priſoners are often ſo ſtinted in beding and covering, that I have ſeen them lying on the cold damp ground, ſcarce defended with ſtraw;

ſtraw; and obliged to ſubſtitute ſmall mats, ingeniouſly wrought of ſtraw, for blankets*.

The men and women are not every where kept ſeparate: nor is there the neceſſary attention ever paid in ſeparating the hardened villain, from the giddy boy.

The table of fees is ſeldom or never hung up, either in the gaol or ſeſſion-houſe, except at the time of the aſſizes, or during the commiſſion in Dublin: whenever I have called to gaolers to produce their table of fees, they never chuſe to make out one, for debtors; and many of them aſſured me, that they don't conſider debtors under the

* Vide—Report of the committee, on the ſtate of priſons, &c. preſented by Mr. Holmes, the 17th of December, 1783.

head of priſoners, nor have they thought themſelves obliged at any time to put up a table of their fees, notwithſtanding that ſeveral of them produced me the act which obliges them to ſtate the fees of priſoners, and fix them in ſome conſpicuous place; ſuch is the equivocal manner by which they wiſh to diſtinguiſh between a priſoner and debtor; their reaſon for this diſtinction is too evident, to require any explanation. The continuance of the abuſes mentioned, with many others, plainly proves the neceſſity for a more effectual regulation; and that the moſt ſalutary laws, framed by the wiſeſt heads, will avail nothing, except ſome method is deviſed, by which they can and may be duly executed. I will not treſpaſs further on my readers time, by mentioning many other abuſes conſtantly practiſed in gaols, which eaſily admit of a remedy; but I think it however

neceſſary

neceſſary to remind gaolers in future, not to defer the cleanſing of the ſewers, ſcraping the floors, or ſweeping the priſons, and removing other annoyances to the day before, or the very day of the judges coming to the different aſſize-towns; for by ſtiring up the ſtagnant filth, the noxious ſtinking exhalations are let looſe and ſet a float in the air, from which, fatal conſequences may ariſe; although from cleanlineſs much benefit is to be expected, yet if the cleanſing of the priſon is to be protracted to the eve of the aſſizes, it will be more prudent to poſtpone it, until after they are over; particularly ſo, if the court and gaol are contiguous to each other, which is generally the caſe: at the ſummer aſſizes, this precaution is abſolutely neceſſary, as from the middle of July, to the latter end of Auguſt, moſt lifeleſs corruptable ſubſtan-

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ces are in the incipient, or abſolute ſtate of putrefaction.

The interference of the head of our univerſity muſt gratify every friend to humanity, but more eſpecially thoſe of this country; the provoſt excited by the dictates of genuine benevolence, has laudably undertaken to reſcue the guiltleſs traverſer and priſoner, from the hand of tyranny and exaction; how praiſeworthy the interference of his majeſty's principal ſecretary, whoſe ſtation imparts dignity to the meaſures he adviſes; whoſe credit and influence will carry weight to induce the execution of them; and who in his peculiar province, can inculcate the principles of rectitude and beneficence into the hearts of the riſing generation, who one day or other will have it in their power to redreſs and alleviate the miſeries of the unfortunate!

fortunate!* The iron age has fled, and the ſpirit of emulation, having charity and *true* policy for its objects, pervades almoſt every breaſt.

Whether the putting priſoners in irons, is, or is not tolerated by the ſpirit of the laws of this country, I do not pretend to ſay; but the uſage, ſo far as it conſiſts with ſecurity, ſhould be rendered as little grievous, as poſſible. There are two ſorts of iron bolts uſed in the gaols of this country, viz. bar and chain-bolts; the bar bolts are very inconvenient and troublefome to the priſoners; and if diſengaged, would anſwer all the purpoſes of a ſhort crow, for digging the ground, perforating the walls, and ſerving as an engine to wrench

* The Provoſt's bill, has for its object, the immediate diſcharge of priſoners, without paying any fees, who are acquited of the charges brought againſt them, &c. &c.

wrench the bars of windows and ſtaples off doors, whilſt they would become the moſt dreadful inſtruments that could be put into the hand of man, when diſengaged, and made the means of aſſiſting his eſcape; of which there have been many inſtances. The chain bolts anſwer every purpoſe intended by the gaoler, in reſpect to their perfectly ſecuring the priſoners. Whether the bolts are of the bar or chain kind, the priſoners cannot draw on breeches made in the common way; and whereas cleanlineſs and freſh cloathing are great eſſentials to health, it will be adviſeable for the gaoler to have the breeches, of thoſe whom he thinks it neceſſary to double bolt, made after ſuch a manner, (which is eaſily contrived,) as to be taken off every night; otherwiſe, by their being over-charged with perſpiration, long retained, they will become unwholſome, not merely to their owners, but to the other priſoners.

Doctor

Doctor Prieſtly and Mr. Harrington, differ moſt eſſentially in their theories, relative to the nature and quality of air, in which animals have for a long time breathed or candles burned; but they agree in the great eſſential, which is, that it becomes totally unfit for theſe purpoſes, but rather deprives the animal of life, and extinguiſhes flame. Doctor Prieſtly ſuppoſes, that the vivifying principle of the air, is ſo altered or deſtroyed, by having it loaded with the phlogiſton (or matter of fire) diſcharged from the blood, through the lungs, at the time of expiration, or from the effluvia of the burning candle, that it is no longer fit to anſwer its chief purpoſe (intended by Providence,) which is, to ſupport life; or is it capable of feeding or keeping up the flame of candles, or other burning ſubſtances; whilſt Mr. Harrington ingeniouſly proves, " That it is the abſence of phlogiſton

" in the air, which renders it unfit for the " purpoſes mentioned." To recite the various experiments he made, to prove this aſſertion, although it might be entertaining to ſome who will pleaſe to peruſe theſe few ſheets, yet it would render the ſubject too prolix, and might be conſidered digreſſive. I ſhall only obſerve, that I am rather inclined to think with Mr. Harrington, and do recommend the lighting of fires * as near the apartments where the air is foul, as they will burn, and the admiſſion of the rays of the ſun into them, if their ſituations will admit of it. But both theſe antagoniſts agree, that without a conſtant ſupply of freſh air, there

* That fire purifies air, fouled by breathing, is certain, and whether that depends on the rarefaction cauſed by the heat, and the current of freſh air which naturally ruſhes where it finds leaſt reſiſtance, or whether the fire imparts to the air, deprived of its phlogiſton, a part of its element, is very immaterial for the preſent purpoſe.

is no living; as man either conſumes or deſtroys the vivifying principle of a gallon of air every minute:—the black-hole at Calcutta fatally evinced this matter.

Prevention is the beſt remedy; but before I mention any thing relative to diſorders, or lay down any general rule for the treatment of them, I will be bold to aſſert, that if the regulations already mentioned, and thoſe which I mean to lay down, are cloſely attended to, we ſhall hear no more of gaol diſtempers or any other, except thoſe to which every man is incident, who is deprived of eaſe of mind and exerciſe; but I mean nothing of the infectious kind, ſave what might become ſo, in any other ſituation. To Mr. Howard, I am indebted for ſeveral of the regulations I intend to propoſe.

1ſt. The ſituation of the gaol ought to be

rather lofty, with the advantage of water, as deſcribed in the former part of this work; and as this ſimple eliment is the common drink of priſoners, the beſt for that purpoſe ought to be procured.

2d. The materials uſed in the building, ſhould be of the beſt kind; an attention to this, is more eſſential than is generally imagined. The rooms ought to be lofty, that the foul air which aſcends, may be out of the reach of their breathing. To raiſe the priſon over arcades, will be attended with ſeveral advantages; a continued gallery, from one end to the other of the priſon, in its greateſt length, and a window placed at each end of it will be of the greateſt utility, as here, they may walk and air themſelves in wet weather; or it may ſerve for thoſe purpoſes at all times, if the gaoler conſiders it imprudent

dent to permit any particular priſoner to walk under the arcades, or in the yard, or if he wiſhes to keep them ſeparate, which in moſt caſes is of the greateſt conſequence; to have two corridores or galleries, in contrary directions, on the ſame floor, or on the different floors, will be attended with great advantage, as one or other of them will always be well ventilated, let the wind be in what direction it may: the doors of the ſleeping rooms may lead from theſe galleries: the men and women ſhould have ſeparate apartments; and the court-yards, or other places, to which at times they may have acceſs, ought to be ſeparated by a wall. Young criminals and priſoners, for trifling offences, ſhould not be kept either by day or night, with the hardened villains; and if it can be done with convenience, (which may be eaſily effected, in priſons which are to be built,)

built,) the leſs intercourſe any of the priſoners have with each other, the better; particularly old offenders, to whom ſolitude and ſilence will be favourable to reflection; and may poſſibly lead them to repentance. This ſeparation will probably prevent eſcapes, or at leaſt render them very difficult, whilſt it will appear more awful to the ill diſpoſed, and the thoughts of ſuch ſeparation from their aſſociates, will be more dreadful to them, than can be imagined.

The privies ought to be ſo contrived, that no exhalations may ariſe from them: one of the greateſt errors in the priſons lately built, is, that this circumſtance has not been attended to, nor are they ſo ſituated that the priſoners, whether debtors or felons can have acceſs to them, except with the knowledge or conſent of the keepers, which is a great

grievance,

grievance, and requires redreſs. To be obliged to raze the privies of the new priſon, the conſtruction of which coſt an immenſe ſum, and the defect of them in a country gaol, built the laſt year, ſtrongly points out the neceſſity of a regulation, even in this article.

Every priſon ſhould have an hoſpital in the moſt airy part of the yard, detached from the gaol, and raiſed on arcades; in the middle of the floor, if built over arches, there may be a ſtrong grate for a current of air, covered with a ſhutter, or hatch, occaſionally; hand ventilators may be uſed, or the ventilator before deſcribed, which ſeems to have the preference.

Notwithſtanding that having common halls for the different claſſes of priſoners to have

acceſs

acceſs to in the day, particularly in very cold weather, when the unfortunate creatures will require the comfort of a fire, may militate againſt the idea of ſeparation; yet if the gaoler will do his duty in attending properly to them, no inconvenience can ariſe from their intercourſe, as he may have ſtated times for their reſort, thither, and may permit ſuch as he thinks prudent, to be there together; but by all means, in as much as he poſſibly can, they ought to be kept ſeparate at night.

There ought to be a pump, pipe or briſk current of water in every yard, and a bath conveniently placed to waſh priſoners that come in dirty, or to beath them at the diſcretion of the medical aſſiſtant. The moſt effectual manner of cleanſing the privies will be to have a conſtant current of wa-

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ter to paſs through them; or if that cannot be obtained, the water that fills the bath, may be let off two or three times a week by a gutter, ſpoute or narrow ſewer, which will give it a degree of velocity, that will aid in carrying off whatever it meets with in its paſſage.

It will be proper to have ſome room laid out in the womens apartments for them to waſh in, as otherwiſe they will keep their hall or ſleeping rooms wet and dirty.

In the debtors ward there ſhould be a day room or kitchen, alſo a large work ſhop for ſuch as pleaſe to work, provided that the priſon is not annoyed by the exerciſe of their employments: taylors, ſhoemakers, and a variety of other profeſſions may be employed in the exerciſe of their trades; pre-

ſerving their habits of induſtry, and contributing to the ſupport of their families.

It will be proper to have a chapel in gaols, where they may be exhorted on the nature of their crimes and ſituations; and although there may be no poſſibility of making proviſion compatible with the nature of the laws of this country for a roman catholic clergyman, yet I am convinced that many of them, from the ſenſe they have of their duty, would be happy to have an opportunity of reforming the principles of lawleſs wretches; and do believe, that the greateſt advantages would ariſe to the community, from the adoption of this method; by giving the clergymen an opportunity of exerciſing their influence, and painting to priſoners the horrors of future everlaſting puniſhments: as this may be effected without much difficuty,

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the gaol inſtead of continuing the greateſt ſchool of vice, may become the ſeat of penance.

A priſon ſhould be ſhut out from the public ſtreet or road, by a wall, and all communication, or means of correſponding between the priſoners and their friends, or aſſociates ought to be prevented, except by permiſſion of the gaoler; this can only be compleatly effected, by, walling-in the priſon and yard; or removing the windows of thoſe already built, from the front, to the rear. There ſhould be no priſon by any means under ground.

The yard of the priſon ought to be flaged or paved, which ſhould be frequently ſwept and waſhed, as well as the halls, corridores, &c. viz. twice a week in ſummer, and as often as it ſhall ſeem neceſſary to the medical aſſiſtant, or clergyman, at other

times. The ſleeping rooms, as well as halls or common priſons, ſhould have every advantage ariſing from freſh air and cleanlineſs; they ſhould have their bedſteads ſo contrived, as to have the head higher than the foot; their ſtraw ſhould be put into ticks; and each bed ſhould be ſupplied with ſufficient covering.

Without due attention to the regulation of a priſon, it is evident that no contrivance or ſtructure can ſecure it againſt diſeaſe, wretchedneſs and profligacy; it therefore will be neceſſary to have ſuch ſuperintendants as may be capable of preſcribing, and inforcing whatever ſhall appear to them neceſſary, for the government of the gaol.

The gaoler ſhould be a humane man, not old or infirm, poſſeſſed of as many good qualifications

qualifications as can poſſibly be obtained; he ſhould not be a ſheriff's bailiff, or of any other employment, which might keep him from his duty.

A medical gentleman of abilities, and acknowledged humanity, ſhould be appointed to attend the gaol perſonally, and not by deputy; he ſhould be obliged to viſit the gaols twice a week at leaſt, and occaſionally, when neceſſary; another part of his duty ſhould be to ſee that cleanlineſs, good order, and other regulations preſcribed for gaols, ſhould be particularly attended to; and when ever a priſoner is committed, previous to his being put into the common place of confinement, he ſhould be examined as to his ſtate of health, &c. by the aſſiſtant, for the reaſons mentioned in the former part of this eſſay. The clergyman (who by a former act is to ſee

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the bread diſtributed, and likewiſe that priſoners ſhall be cleanly lodged, &c.) will be another check over the gaoler, if he will pleaſe to viſit himſelf, twice a week, for the purpoſe intended by his appointment; and except he finds that they keep themſelves as clean as the nature of their circumſtances will admit of, he may refuſe them their ſtated allowance of proviſions. He ought to read frequently the rules for the regulation of the priſon, to the confined, that they may be reminded of their duty and ſubordination, whilſt impriſoned.

I have already mentioned the great advantages that will ariſe from cleanlineſs, freſh air, cool, though not cold apartments, wholſome food, having freſh cloathing for them at the time of trial, &c. intended to render gaols both in their conſtruction and govern-

ment

ment effectual, for every purpoſe of humane and ſecure confinement, wiſe correction, and exemplary puniſhment; and as the laws now in being on this ſubject are ſo numerous, and widely diſperſed through the ſtatute books, without ſyſtem, connection, or effect, it is become neceſſary from a principle of policy, as well as humanity, to enact one general law, to repeal all the old ones, and to enforce ſuch new proviſions, as may be wanting to complete a plan of reform in priſons. That this great object of national policy demands the immediate attention of the legiſlature, is too evident. The numbers that are daily cut off by the moſt peſtilential fevers, fluxes, putrid ſore throats, &c. and the melancholy and irrecoverable ſtate which others are generally in, when diſcharged out of priſon, point out the abſolute neceſſity of an immediate regulation; and as there are ſeveral gaols in the kingdom

to

to be immediately built, ſome of which are already preſented for, and the money raiſed. Would not this be a moſt ſeaſonable moment to recommend methods by which they may be properly executed, with reſpect to their ſituations*, materials, and form, ſo as not to ſquander the public money, and diſappoint the community, which has happened lately in ſeveral inſtances?

To propoſe the manner of laying out the apartments for the keeper, and different claſ-

* The putrid exhalations ariſing from canals, ooze, marſhes, &c. in hot weather, act like the ſteams of a foul and crouded ſhip, or gaol, and corrupt the humours; and as it is obſerved that weſterly winds blow three fourths of the year in this country, we ought to avoid building priſons in the draught of ſuch wind, leſt unwholeſome exhalations, either from marſh, crouded towns, or any other cauſe, might frequently be carried thither. The neglect of this obſervation, was attended with fatal conſequences in Granada and Jamaica. Page 68, 69.

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ſes of priſoners; the height and dimenſion of rooms, and their numbers*; the ſtructure and grating of chimnies, to prevent eſcapes, and to anſwer an excellent purpoſe, in ventilating the different apartments, even of thoſe which have no fire-places in them, but may have tubes terminating in a particular direction in the common funnels, which will carry off all their foul air; the manner of altering old priſons, (which muſt depend on local circumſtances,) ſo as to render them ſecure and healthful; with a variety of other matters, which it will be prudent to attend to, muſt neceſſarily be omitted here, and the conſide-

* It is neceſſary that ſome county and city priſons ſhould be large, others on a ſmaller ſcale; proportioned to the numbers that are generally confined, whether felons or debtors, thoſe condemned to hard labour, &c.

ration of them recommended to whoſoever will be employed for the regulation of gaols.*

* Quere. Would not the having a general inſpector who would viſit the gaols once or twice a year, and ſee that the regulations preſcribed by law were punctually executed, be one of the moſt effectual methods of carrying the intention of the legiſlature into effect?

IN

IN medicine, to preſcribe with confidence, and to purſue nature in all her various ſtages, it is abſolutely neceſſary that facts and theory ſhould directly agree; for though a particular mode of treatment is known to ſucceed, not knowing upon what philoſophical principle it acts, the mind never gives a reſolute aſſent to it; and if any alteration takes place in the ſymptoms, it confounds the practitioner: but when theory coincides, and he can aſſign rational arguments, he ſtands on a firm foundation, practices with reſolution, and is not alarmed by new ſymptoms, without juſt reaſon.

Man's mind is naturally of an active, curious diſpoſition, anxious to reaſon; but if

the true ſimplicity of nature does not ſtrike him, he will begin, as it were, to fabricate with a wild imagination, acting and counteracting, fantaſtically; and will, from a natural pride, founded in ignorance, force his practice, to ſupport his theory. It is from this reaſon, that the piercing cries of nature have been heard, unnoticed: in inflammatory diſeaſes, where the patient was conſuming by heat and thirſt, where cold air, water, and grateful acids were ardently called for, they were refuſed him, and in room of them, heating medicines were ordered, (adding fuel to flame,) upon ſome vain, trifling, and mechanical idea, of evacuating morbific matter. In diſorders of the putrid kind, which are attended with dejection, weakneſs, loathing of food, and often with great dread and apprehenſion, &c. they have thought it neceſſary to ſupport the patient's ſtrength and

ſpirits

ſpirits, with ſmall broth, wine whey, and to keep the body rather coſtive than laxative in the beginning, leſt their ſtrength might be impaired by the inteſtinal evacuation; and they generally have taken care to keep the body well covered, and the curtains cloſed, to procure *a fine breathing ſweat.*

I am ſorry to have it to relate, that even at this enlightened moment, ſome of our practitioners are too fond in putrid diſorders, of preſcribing medicines by way of cordials, which poſſeſs no *antiſeptic* virtue whatſoever; conſequently, by their accelerating the circulation, they heighten the putreſcence, and inſtead of becoming *antidotes*, they expedite diſſolution; for no one ſpecies of either diet or medicine, in thoſe complaints, can prove cordial, but ſuch as reſiſt putrifaction. How irreconcileable to the rationaliſt are the

foregoing

foregoing methods of treating diſeaſes, and what pains are not taken to give employment to the *grave-digger?*

The phyſician who wiſhes to diſcharge his duty, muſt be a cloſe attendant on nature; when he finds her capable of doing herſelf a kind office, whether by vomiting, ſtool, perſpiration, or any other evacuation, ſhe is to be left to herſelf, or gently aſſiſted by ſome ſimple diluting drink; if ſhe ſhould not be capable of throwing off whatever oppreſſes or annoys her, then the phyſician is to find out the moſt gentle and effectual method of doing it; but if theſe evacuations ſhould be profuſe, and in their conſequences be likely to injure the patient, they are to be checked, and even reſtrained; when any particular acrimony takes place, it is to be corrected; if the diſorder depends

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on plenitude, emptying is the remedy; but if on inanition, the patients juices and ſtrength are to be ſupplied and reſtored; when the blood is too thick, and running into inflamation, the lancet, cooling, diluting drinks, and ſaponaceous acids, with meagre diet, will in general anſwer the intention of the preſcriber; and when too thin, particularly if that depends on putrefaction, then, theſe remedies,—diet as well as medicine, which act as agglutinants, (and give the proper tone and energy to the parts,) of which there is a great variety, more or leſs antiſceptic, may be uſed with the probability of ſucceſs, by adapting them to the degree of diſſolution or poverty of the blood, which they are intended to correct. The ſame may be ſaid of every other complaint; for unleſs we endeavour to find out, and remove, or correct their cauſes, the effects muſt continue. By

attending

attending to this general idea, I am intitled from experience to declare, that he who makes nature his pilot, will ſeldom be diſappointed; but whereas it would defeat the intention of this ſmall eſſay, to treat particularly of every diſorder, to which the confined may become ſubject, I ſhall content myſelf at preſent, with ſtating in general what occurs to me, in reſpect to putrid diſeaſes.

The malignant, putrid, or ſpotted fever, may be juſtly called the *peſtilential fever* of Europe; as in many of its ſymptoms it bears a ſtrong reſemblance to the *plague*.

The cauſes of theſe fevers are found in confined narrow places, not properly ventilated, or freed from putrid animal, and vegetable, effluvia; the want of cleanlineſs, unwholeſome

unwholeſome food, having numbers crouded together, particularly in a moiſt, damp atmoſphere, may with juſtice be ſtated as further cauſes of theſe diſorders; the more ſo, if tedious grief and vexation attend them; on this account gaols are expoſed to this peſtilential infection.

The ſymptoms of this complaint generally are, firſt, ſlight interchanges of heat and cold, often a ſenſe of numbneſs in the arms, a total and ſudden loſs of ſtrength, a dejection of the ſpirits, a ſudden alteration in the countenance, eſpecially in the eyes, ſometimes a pain in the head, and ſort of confuſion, and a pain in the loins; at other times the patients complain of a ſort of lightneſs in their heads; in mentioning this ſymptom, they often deſcribe it, as if their heads appeared to them, empty, or hollow; there

is generally a nauſea, and ſometimes a vomiting of bile; a noiſe in the ears frequently attends this complaint, with laborious breathing; the tongue in the begining is often white, and they nearly loſe all ſenſe of taſte, except for acids; when they are deſired to raiſe their hand, they find themſelves incapable of ſupporting it in a ſteady poſition* ; and I have almoſt always been capable, of meaſuring their degree of weakneſs, by deſiring them to ſqueeze my hand, as hard as they could. When the complaint is further advanced, and that proper methods are not timely applied, the tongue becomes of a darker colour; if blood is taken, it appears nearly diſſolved, and ſoon becomes putrid; the ſtrength becomes more proſtrate; a delirium

* Sir John Pringle obſerved the tremor of the hands to be one of the ſureſt ſigns of the gaol or hoſpital fever.—Page 291.—And Doctor Munro frequently obſerved worms to be diſcharged from them, in this complaint.

and

and conſtant muttering comes on, the pulſe quickens and ſinks; putrid ſweats, *petechiæ*, incontinency of urine, and fœtid ſtools generally precede the termination of the fatal cataſtrophe. By attending to theſe ſymptoms we may eaſily diſtinguiſh between diſorders of this claſs, and thoſe of the inflamatory kind; the neglect of which might plunge the preſcriber into an irremediable error; therefore it is ſtrongly recommended, that when ever the medical aſſiſtant ſhall be called on to attend a patient in the gaols, that notwithſtanding the diſorder (from the patients having drank of ſpirits or other liquors*, or from perhaps ſome outward injury †.)

* This is frequently done to remove the dejection which is inſeparable from this ſort of fever.

† From catching cold, or other cauſes, they may be attacked with inflamatory complaints in the priſon, although they are not frequent; as their diet is low, and they cannot commit exceſſes in exerciſe.

may put on the appearance of the inflammatory kind, yet the recollection of the patients being in the way of putrid effluvia, ſhould not be loſt ſight of; but to the contrary, through the whole of the treatment, a watchfulneſs muſt be kept up, leſt any thing putrid or malignant ſhould creep in, or be connected with the complaint; from the ſymptoms which generally attend the diſorder deſcribed, it is evident that the cure muſt conſiſt in correcting the putrid leven, or effluvia, introduced into the ſyſtem: Therefore, if any perſon ſhould be attacked with a complaint of the putrid kind, the fundamental part of the cure, is, to remove the patient immediately into a dry, open room, to have him freſh ſhifted with well aired linen, and every other neceſſary covering: whatever medicines are given while the

corruption

corruption of the air continues, there can be little hopes of recovery; and although the patient ſhould breathe no other infectious air, than what might be rendered ſo by the diſcharges of his own body, even that is to be expelled by frequent ventilation; the room ſhould be frequently refreſhed by the ſteam of vinegar, which may be obtained, by throwing ſome of it on red hot iron, or of brimſtone uſed in like manner, or ſome other ſubſtance capable of beſtowing an acid vapour, or a fixed air, to the ambient atmoſphere. In general, it will be prudent to bathe his feet in warm water. As in moſt putrid caſes the ſtomach and bowels contain a quantity of corrupt humours, which if permited to remain, will not only become more acrid and putrid, and by their irritation keep up the fever, and inflame the containing organs, but will likewiſe inſinuate themſelves into the

the maſs of blood, which they will contaminate, and by their levening power will convert into their own nature: what proſpect, under ſuch circumſtances, can there be of ſucceſs? none: therefore the ſooner the ſtomach and bowels are cleanſed, the better; but this ought to be procured by ſuch means as cannot induce inflammation. A few grains of ipecacoanha, or a weak ſolution of tartar-emetic may be given, and its operation ſeconded by a few bowls of weak camomile-water, plain warm water, or ſmall balm or mint tea. After the operation of this is over, the patient finds himſelf better, for a few hours; during which time he generally falls into a perſpiration, which may be indulged, by taking frequently a little two milk whey, or lemonade. After four or five hours it will be prudent to give him a ſolution of ſalts and manna, ſo as to procure a

few

few ſtools, or equal quantities of cream of tartar and rhubarb, which will ſerve to cleanſe the inteſtines, while the acid or aceſcent drink will allay, or counter-act the putrid ferment, which otherwiſe might exert its baneful influence, to the no ſmall danger of the abdominal viſcera.

Although this diſeaſe in the beginning, is not at all times eaſy to be diſtinguiſhed from any common fever*, yet no ſort of danger can attend the treatment recommended, let it be of what ſpecies it may; for ſuppoſing it to partake ſomewhat of an inflammatory nature, the cleanſing of the firſt paſſages will be uſeful; but that may be preceded by blood-letting, in ſuch proportion as will ap-

* Febres malignas in principio ſtatim cognoſcere difficile eſt, cum malignitas ſæpe diu lateat, et non niſi ubi vires ſumpſit ſeſe predat. Serment. epit. de feb. lib. iv. chap. x.

pear

pear prudent to the preſcriber; and even in the firſt ſtage of a putrid diſorder, ſhould the ſubject be ſtrong, and labouring under an intenſe pain in the head, back, or any other part, with a ſtrong pulſe or other ſymptoms of plethora, no ſort of diſadvantage can attend the taking a ſmall quantity of blood; to the contrary, a great benefit may ariſe, not only by removing the diſpoſition which the organs have to inflame, but if the attendant takes care to have the blood let from a proper orifice, and keeps up the patient's ſpirits while the vein is diſcharging*, he will be capable of forming a more accurate opinion of the ſtate of the patient's blood, by the exerciſe of all his ſenſes, than he can poſſibly do, without it. To this method of practice I was often indebted for ſucceſs, in

* Vide the great utility of this in Hewſon, on the blood, vol. I.

the

the moſt malignant fevers, for when the loſs of an ounce of blood, or perhaps leſs, could do no ſort of injury, it rendered me maſter of the ſtate of acrimony, and diſſolution of the blood, which knowledge intitled me to preſcribe with confidence.

So ſoon as the bowels are free, the next matter to attend to, if the ſymptoms continue, is, to take care that no one ſort of drink ſhall be given, but ſuch as may be expected along with refreſhing and diluting the blood, to aſſiſt in correcting putrefaction, aſſwaging thirſt, and keeping up a proper freedom in the bowels. To anſwer theſe purpoſes, I always had recourſe to lemonade and butter-milk, two milk whey, barley water with lemon juice and ſugar, ſo as to render it palatable; and if the bowels became too free, I generally found that rice-water, and chalk-

water, with a few drops of the acid elixir of vitriol, anſwered my intention; and as the elixir was always added immediately before the drinking of the chalk-water, I flattered myſelf with having conveyed fixed air into the ſtomach, which is attended with the greateſt advantages in putrid caſes.

My conſtant medicine in the beginning of all putrid and malignant complaints, is nothing more than the common ſaline draught, (however making the acid predominant, and) taken in the act of effervescence, and rendered pleaſant with ſugar; or if the bowels are too free notwithſtanding the uſe of the drinks mentioned, and that the vegetable acids are omitted, I then have recourſe to the mineral acid, with water, and to allum-whey; and as the obſtinacy of the bowel diſcharge portends a putrid diſſolu-

tion

tion of the blood, I immediately fly to ſtrong decoctions of the bark, rendered aſtringent by the addition of tormentil root, and ſometimes by the vitrioltic acid; and if the patient wants a further cordial at this time, I recommend claret, which reſiſts putrefaction, gives energy to the languid fibre, and reſtores the relaxed ſtate of the ſtomach and bowels. If the tremulous motion of the tendons ſets in, or the hiccup, I have recourſe to camphorated juleps, prepared on an infuſion of valerian tea, and I reſtrain if neceſſary the violence of the camphor's action, or heating quality, by the adition of ſome vegetable acid, which is attended with another advantage, that, of making it ſit more eaſy on the ſtomach. Whenever a ſtupor or delirium comes on, or even threatens, I think it adviſeable to have recourſe to bliſters.

Through the intire ſtages of theſe complaints, my object is to reſiſt putrefaction, as the variety of ſymptoms which appear, are only the conſequences of its different degrees, and dependant on the difference of conſtitution; therefore, purple-ſpots, hemorrhages, putrid-ſtools, &c. although they may require ſome particular attention, yet as they depend on the ſame cauſe, both diet, drink, and medicine, muſt be *antiſeptic*. I have given ripe, and even unripe fruits with ſucceſs, the latter when I wiſhed for an auſtere acid: according to their fancy they have their drink warm or cold; from the latter I never found the leaſt diſadvantage, to the contrary, it ſeemed to act as a tonic. From having found that they bore moving very well from the place, or beds they were attacked in, to other apartments, it occured to me, that independant of the change of air,

they

they derive ſome benefit from being unavoidably expoſed to the cold; I frequently have given them a ſort of air-bath, ſometimes by removing all the bedcloaths for one or two minutes, three or four times a day, which generally ſeemed to be attended in their very relaxed, enervated ſtate with great advantage. However novel this application of cold air may appear to many, thoſe who conſider that cold bathing often creates appetite, and invigorates the digeſtive organs, in relaxed habits, will not be at a loſs to account for the manner in which bracing the ſurface may give tone to the vital organs, in this diſeaſe; which are rendered incapable from doing their duty, by the malignant or mephytic matter, influence, which is noxious to the very ſource of ſtrength, and principle of life.

WHATEVER

WHATEVER tends to produce putrid or malignant fevers, may likewiſe occaſion putrid ſore throats; therefore gaols may with great propriety be conſidered (though unfortunately,) well adapted to give riſe to this diſorder; particularly, as the want of ſufficient cloathing, and their lying on the damp naked ground, will by checking the peſpiration afford new cauſes for having that part attacked; for we generally find, that the throat is the organ firſt affected, after what we call *catching cold*; which conſiſts in having the perſpiration checked.

The ſymptoms of this complaint, are of ſuch a nature, that if the medical aſſiſtant attends

attends to them, he cannot be deceived; the palate of the mouth, uvula, and other parts about the throat, are generally of a florid, red colour; and the tonſils are for the moſt part, though not always, ſwelled: the difficulty of breathing or ſwallowing, is often not great, though the parts may appear tumified; generally on the ſecond day pale white ſpots are to be obſerved on the tonſils, and near them, and ſometimes only one large ſpot of an aſh colour, appears; the whitiſh ſpots cover ſo many ulcers; the patient complains very much of weakneſs and dejection; he is frequently attacked with a nauſea, vomiting or purging: as the diſeaſe increaſes theſe white ſpots become more opake, and on inſpection will be found to put on the appearance of a real mortification; it then becomes highly infectious, and as much prudence is neceſſary to keep the patient labouring under this

diſorder,

diſorder, in a well aired apartment, as would be, had he been ſeized with the moſt malignant fever.

As this diſorder ſometimes is more or leſs malignant, and the perſon attended may be more or leſs robuſt, it is impoſſible to lay down invariable rules for the treatment of it; for variations muſt be made in the cure of each individual, according to the circumſtances of the caſe; if the patient is ſtrong, his blood will be more ſizy; if weak the more diſſolved;—in the former caſe, ſhould the part appear much inflamed, very painful, and that his pulſe are ſtrong, a little blood may be taken; nitre may be uſed, or vegetable acids, in proportion to the inflammatory appearances; but in this treatment much circumſpection is neceſſary, and nothing can warrant this mode of proceeding,

but

but, the ſymptoms of plethora and tenſion. If the patient is relaxed, dejected and weak, which is generally the caſe, notwithſtanding he may appear a full ſubject, the bark, claret and the mineral acids, will, with the vegetable acid and aceſcent drinks form the beſt treatment. The bowels are to be kept free, but not ſo as to weaken the patient; and if there is a nauſea or inclination to vomit, the ſtomach is to be cleanſed by repeated draughts of camomile water, or a light infuſion of ipecacoanha; in the beginning a gargle may be prepared of ſage and roſe leaves, to which may be added a little honey of roſes; but if the parts ſhould put on a mortified appearance, the bark decoction, with tincture of myrrh, vinegar and honey of roſes will have the preference, and the ſloughs or diſcoloured parts may be touched with ſpirits of ſalt from time to time, until

they drop off. With reſpect to the uſe of bliſters in this complaint, while the pulſe is full and quick, and the patient ſtrong, they rather increaſe the febrile ſymptoms; but when cordials are neceſſary to prevent the patient from ſinking, they become uſeful remedies. * The patient ought to be particularly careful to gargle before he drinks, that the putrid, ſanious matter may be waſhed away,

* Some time ago I was called upon to attend the family of Mr. Tomlinſon, in King-Street; five of whom were ſeized with a moſt putrid ſore throat; one daughter thirteen years old, expired two hours before my arrival: Mr. Giffard, a very ingenious man, was the apothecary who attended; he told me that ſhe complained but twenty-ſeven hours before her death. Such was the poiſoning quality of the infection ſhe received. On examining her throat, it appeared of a ſky blue colour, but without any ſort of ulceration or fœtor. The putrefaction run ſo high in two of the family, that I was obliged to uſe the ſpirits of ſalt in the manner deſcribed, and their conſtant medicine was bark acidulated with the vitriolic acid, their gargles were highly anticeptic, being compoſed of bark, myrrh, &c. and their conſtant drink was plain claret, and ſmall allum whey. I had occaſion to bliſter but one of their throats. They all recovered.

and

and not carried into the ſtomach, where it would act as leven, corrupt the humours, and bring on vomiting, purging, &c.

The *dyſentery* or *flux*, as it generally ariſes from moiſt putrid vapours, from obſtructed perſpiration, and unwholſome food, and that it is often of a putrid nature, and highly infectious, may juſtly be conſidered a gaol diſeaſe. The ſymptoms of this diſorder are, a looſeneſs of the belly, great reſtleſſneſs and anguiſh, frequent propenſity to go to ſtool, with *teneſmus* or needing; the ſtools are compoſed of thin excrement, and mucus mixed with bile, and frequently more or leſs blood; ſometimes there is no blood, notwithſtanding which, it is not the leſs dangerous; to the contrary, the diſpoſition which the bowels

have to inflame in this diſorder may be leſſened, by the veſſels diſcharging blood, which removes the tenſion of the parts; but when the mucus, which is the natural defence of the bowels, againſt the irritating excrement is abraded, their diſpoſition to inflame is heightened. If the pulſe is ſtrong and quick, or that the patient is not very weak, it will be prudent to take ſome blood, and this may be repeated in proportion to the neceſſity, which will be marked by the ſtrength of the patient, hardneſs, fulneſs and frequency of the pulſe: This being premiſed, if neceſſary, the patient ſhould take a vomit, and the day after a gentle purge, which may be either of rhubarb, and cream of tartar, ſalts and manna, or any other cooling phyſic; but through the whole of this complaint, every medicine draſtic or irritating, is to be avoided. The bowels are to be kept free during this diſeaſe,

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as otherwiſe it would be only locking up the peccant matter, to the utter deſtruction of the patient. The warm bath will be highly proper to recal the perſpiration to the ſkin, which is generally obſtructed in this diſorder, falls on the bowels, and keeps up the irritation and diſcharge. When there is reaſon to believe that the bowels are well cleanſed, nauſeating potions of tartar-metic may be frequently given, which will partly remove the diſpoſition that the bowels have to empty themſelves, as the inclination to vomit will reverſe the periſtaltic motion, and bid fair to reſtore the perſpiration.

In proportion to the degree of fœtor in the ſtools, the treatment is to be more or leſs *antiſceptic*; and ſo long as the diſcharges are acrid, it will be prepoſterous to give aſtringents. In the putrid flux, melliorated acids

may

may be given; and a greater advantage will ariſe from the uſe of glauber or epſom ſalts, with tamarinds, pulph of caſſia, &c. than will from rhubarb; therefore it is, that whenever I give rhubarb, cream of tartar is added, partly to prevent its after-binding quality, and partly that this acid may aſſiſt in correcting the putrid contents of the bowels. Ripe fruits in place of being the cauſe, are frequently the beſt remedies in fluxes. In obſtinate diſorders of this claſs, when the putrefaction is great, the bark has been a noble medicine, and if any thing is apprehended from its aſtringency, a little cream of tartar may be added. The *cortex ſimarauba* has great virtues, I have given decoctions of this bark with great ſucceſs, after cleanſing the bowels three or four times: in reſpect to the uſe of opiates, they often become neceſſary to leſſen the irritability of the bowels,

of

of courſe to reſtrain the evacuations, and procure reſt; however much circumſpection is neceſſary to be obſerved in the uſe of them*.

I will conclude with mentioning, that in all putrid diſeaſes, my directions are, to keep the patients clean, and their apartments well aired; I never allow the curtains to be cloſed. Their diet and drink are either acids or aceſcents; broths, oils, and all animal food, are poſitively prohibited; when I can procure living or growing vegetables†, they

* The firſt effect that generally is perceived, after the uſe of opium, is, a fullneſs and frequency of the pulſe, therefore ſo long as there are ſymptoms of plethora or tenſion opiates are improper.

† I have made ſeveral experiments on the principle of Doctor Prieſtly, and found, that in all caſes growing vegitables abſorb from the tainted air, its putrid contents; which becomes a pabulum to them, whilſt it renders the air ſalutary, How providential this! therefore the uſefulneſs of living plants.

are placed in the rooms; a clear fire, at a certain diſtance, (ſo as not to heat the patient,) if the air is very moiſt, is introduced; this deſtroys the damp, by beſtowing its element to the air, and renders it fit for reſpiration, whilſt by rarafying the ambient air, there is a conſtant ſupply of that abroad; and I order glyſters, when they ſeem neceſſary, to be prepared of wort, in its higheſt ſtate of fermentation. Such has been my general method of treating putrid diſeaſes, and which from an experience of ſeveral years, I have reaſon to recommend.

FINIS.